RETHINKING THE DESIGN AND IMPLEMENTATION OF FINANCIAL SERVICES FOR POVERTY REDUCTION: A CASE OF NORTHERN GHANA

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RETHINKING THE DESIGN AND IMPLEMENTATION OF FINANCIAL SERVICES FOR POVERTY REDUCTION: A CASE OF NORTHERN GHANA

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Abstract

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Rethinking the design and implementation of financial services for poverty reduction: A case of Northern Ghana

Keywords: Financial Services, Ghana, Jirapa, Livelihoods, Microfinance, Poverty, Product Design, Vulnerability

The thesis empirically examines how microfinance products are designed and implemented, and the implications for clients' households and sources of livelihood. The study argues that the design of products and implementation that reflect the livelihood needs and poverty context of clients is one of the effective ways to reduce poverty. It investigates the microfinance operations of three financial institutions: Sinapi Aba Trust (SAT), St Joseph's Cooperative Credit Union (CCU) and Sonzele Rural Bank (SRB) in Jirapa, a municipality in Northern Ghana. The study deployed a mixed-methods approach to collect data from six rural and urban communities. Data was sought from secondary sources, 20 interviews, 10 focus group discussions and 120 questionnaires. The research adopted the Sustainable Livelihoods and the Making Markets Work for the Poor approaches as a guide in the framework of analysis. The study, using qualitative and quantitative analytical tools found that product designs of SAT and SRB did not reflect the needs and poverty context of the majority of their clients. Clients of SAT and SRB were found to be less involved in the product design processes, suggesting a top-down institutional approach that seldom incorporated the needs of the poor. The method of group formation has a substantial implication on members' poverty outcomes. Groups involving only females had a significant and positive relationship with members' household and business outcomes, while members of male-only groups had a negative relationship with their household outcomes. The thesis concludes that accessible interest on loans and incentives to encourage savings would make microfinance markets work more sustainably for the rural poor. The findings challenge a reconsideration of the design of microfinance products to integrate financial technology as an efficient approach to deliver financial services, especially in rural areas.

DEDICATION

This work is dedicated to the blessed memory of my beloved sister, Clare Naab, who passed to eternity during my fieldwork for this thesis; and my late father, Mr Augustine Tiizie Naab.

(1 Thessalonians 5:18)

I also dedicate this work to my beloved mother, Mrs Florence S. Naab Karbo.

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LIST OF ABBREVIATIONS

Accumulating Savings and Credit Associations	ASCAs
Association of Financial Non-Governmental Organisations	ASSFIN
Association of Rural Banks	ARB
Bank of Ghana	BOG
Business-to-Person	B2P
Commercial Banks	CB
Consultative Group to Assist the Poorest	CGAP
Cooperative Credit Union	CCU
Credit Union Association	CUA
Credit Union Software	CUSOFT
Development Assistance Committee	DAC
Directorate of Crop Services	DCS
Domestic Credit	DC
Economic Recovery Program	ERP
Financial Non-Governmental Organisation	FNGO
Financial Sector Adjustment Programme	FINSAP
Foreign Direct Investment	FDI
General Insurance Corporation	GIC
Ghana Alternative Exchange	GAX
Ghana Cooperative SUSU Collectors Association	GCSCA
Ghana Growth and Poverty Reduction Strategy	GPRS
Ghana Living Standard Surveys	GLSS
Ghana Microfinance Institutions Network	GHAMFIN
Ghana Rural Bank Computerisation and Interconnectivity Project	GRBCIP
Ghana Statistical Service	GSS
Ghana Stock Exchange	GSE
Government-to-Person	G2P
Government of Ghana	GOG
Gross Domestic Product	GDP
Highly Indebted Poor Countries Initiative	HIPC
Information and Communication Technology	ICT
International Development Enterprises	iDE
Know Your Customer	KYC
Life Insurance Corporation	LIC
Livelihood Empowerment Against Poverty	LEAP
Microfinance and Small Loans Centre	MASLOC
Microfinance Institutions	MFIs
Millennium Development Authority	MiDA
Ministry of Food and Agriculture	MOFA
Mobile Money Operations	MoMo
Multidimensional Poverty Index	MPI
Nation Builders' Corps	NABCO
Non-Bank Financial Institutions	NBFIs

Non-Governmental Organisation	NGO
Non-Performing Loans	NPL
Official Development Assistance	ODA
Population & Housing Census	PHC
Focus Group Discussion	FGD
Poverty Reduction Strategy Papers	PRSPs
Rotating Savings and Credit Associations	ROSCAs
Rural and Community Bank	RCB
Savannah Accelerated Development Authority	SADA
Sinapi Aba Trust	SAT
Small and Medium Enterprises	SME
Sonzele Rural Bank	SRB
Structural Adjustment Program	SAP
Sustainable Livelihood	SL
Sustainable Livelihood Approach	SLA
Veterinary Services Department	VSD

CHAPTER 1

INTRODUCTION

1.0 Background to the study

Poverty remains one of the world's significant headwinds confronting development, especially in developing countries. According to estimates professed by the Global Multidimensional Poverty Index (MPI), 1.6 billion people, living across 108 countries representing 78% of the current global population are poor (Alkire et al. 2014). The MPI is described as the cumulative simultaneous challenges poor people face, spread across diverse facets of their livelihoods, such as living standards, education and health condition of individuals in a household (Alkire et al. 2014).

The paths to poverty reduction have been widely discussed in both development and economic theory and practice. While there have been several disagreements on which path to pursue, there is a convergence that tackling poverty requires an understanding of the contextual issues and the appropriate tools needed in each context. It has been argued that economic growth provides an option for developing countries to offer welfare opportunities that help to improve the standard of living of the poor (Ravallion and Chen 2003; De Janvry and Sadoulet 2009). However, the United Nations Development Programme ((UNDP 2016: 4) suggest that while economic growth is an influential source for poverty reduction, that alone is not adequate unless it is inclusive and equitably distributed. The process of inclusive growth requires the involvement of poor people in the economic activities that result in growth for them to reap the benefits.

In the context of Ghana, poverty reduction has seen different phases of policy incubation and implementation, with varying accounts of their effects on the poor. The outcome of policies such as the Structural Adjustment Programs (SAPs), Economic Recovery Programs (ERPs), Highly Indebted Poor Countries Initiative (HIPC) with its accompanied Poverty Reduction Strategy Papers (PRPs) has generated huge debates on their impacts on the economic lives of the poor. Indeed, critics such as (Abugre 2000; Easterly 2003; Malaluan and

Guttal 2003; Oberdabernig 2010) say that these policies had further deteriorated the socioeconomic plight of the poor instead of lifting them out of poverty. Unfortunately, this suggests how elusive the global fight against poverty has been, especially from the perspective of developing countries such as Ghana.

However, some literature in development economics postulates that access to financial resources is a stimulant of the development process (Lynch 1996; Thiel 2001; Todaro and Smith 2012). As a result, the establishment of formal financial institutions becomes a critical component of any development policy. However, the formal financial sector is criticised for systematically excluding the poor. The argument has always been that there is no business case to serve the poor since their volume of transactions are mostly low (Karlan and Zinman 2011).

Nevertheless, other factors inhibit formal financial institutions in developing countries to serve the poor. Such factors contribute to market imperfections that result in credit market failures. In essence, formal financial market failures mainly limit the availability of financial resources to the poor due to information asymmetry (Garmaise and Natividad 2010), strict collateral requirements (Flatnes and Carter 2019), and bureaucratic loan application and approval procedures (Hinson 2011) of formal financial institutions, among others.

Nonetheless, addressing these obstacles in the credit market can help improve access to finance – in the form of small loans, to transform the productive assets of the poor (Arouri et al. 2014). Microfinance was introduced to close the gap that hitherto excluded poor clients from the financial system.

According to Robinson (2001: 9), microfinance is defined as: “small-scale financial services – primarily credit and savings – provided to people who farm or fish or herd; who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and groups at the local levels of developing countries, both rural and urban”.

The Consultative Group to Assist the Poorest (CGAP) add that microfinance[1] represents financial services provided to individuals excluded from the formal financial sector due to the high transaction cost and information asymmetry (CGAP 2013).

According to Yunus (2007), credit constraints imposed on the poor are to be blamed for the worsening situation of the poor; Hermes and Lensink (2007) corroborate this opinion and further allude that lack of credit to the poor is viewed as one of the critical reasons why destitution remains an issue in developing countries. The contributions of microfinance to poverty reduction have been empirically well explored in several developing countries. Indeed, it has been linked to female empowerment (Niaz and Iqbal 2019; Reyes and Fattori 2019; Sinha et al. 2019), increment in school enrolment (Pham and Nguyen 2019) and improved agricultural productivity in farming communities (Zeller and Meyer 2002; Nosiru 2010).

In recent times, criticisms have been levelled against the microfinance model – casting doubts on its potential to reduce poverty[2]. Some studies have strongly critiqued the activities of microfinance from an ethical perspective (Bateman and Chang 2012; Harper 2012; Hudon and Sandberg 2013). They argue that Microfinance Institutions (MFIs) have lost their 'moral and ethical compass' (Hulme and Maitrot 2014; Maitrot 2014), due to their adoption of unfair lending practices and charging usurious interest rates (Bateman and Chang 2012; Hulme 2015). Critics such as Reed (2013) argue that microfinance has failed to improve livelihood incomes, but rather contributed to increased indebtedness of the poor, and in some instances leading to death through suicide. Without doubt, coherent product and implementation designs matter, if microfinance is to play an effective role in providing access to financial tools for poverty reduction. As such, studies have criticised the methodological flaws in microfinance interventions – mostly evident in the product and implementations designs (Marulanda et al. 2010; Jones 2020).

[1] Microfinance generally entails the provision of financial services to poor and low-income individuals excluded from the conventional financial system, due to lack of collateral and asymmetric information. These services provided are usually customised to fit the needs of poor clients, as opposed to the standardised services that the conventional financial institutions provide (CGAP 2013).
[2] Bateman (2010), in the book titled 'Why doesn't microfinance work?', argues that microfinance represents a poverty trap rather than a tool for reducing poverty.

1.1 Problem statement

Notwithstanding the above, for many developing countries like Ghana, microfinance continues to hold a promise – as a tool for fighting poverty, especially in rural communities. The history of microfinance is often akin to poverty reduction. The fundamental theory of change that underpins the development of the microfinance industry has been that access to adequate financial services helps reduce household poverty and improve livelihood outcomes (Hulme and Mosley 1996b; Hulme 2007; Mader and Morvant-Roux 2019). The reliability of this claim has been mixed and is still contentious among academics.

Nevertheless, an emerging theory suggests that the main benefit of poor households' access to financial services is they contribute to building resilience; supporting households to anticipate and develop an adaptation mechanism to recover from the adverse effects of livelihood shocks (Borner et al. 2012; Alobo Loison 2015; Gash and Gray 2016; Crookston et al. 2018). It is believed that such resilience would protect livelihoods, and consequently reduce the chronic vulnerability that undermines growth (Crookston et al. 2018). Notwithstanding this new claim, limited studies have considered the product design and implementation processes of MFIs and their effectiveness to adequately capture the livelihood needs and vulnerabilities of clients.

Most recent discussions on microfinance are centred on commercialisation as a means of achieving outreach and sustainably reducing poverty (D'Espallier et al. 2017). However, it is argued that the transformation of MFIs would lead to an ideological change of focus. A shift from targeting the poor to seeking profitability through serving wealthier clients with financial tools that may not be needed by poor clients undermines poverty reduction (Woller 2002; Brett 2006; Wagenaar 2012). Weiss and Montgomery (2005: 394) add that the commercialisation drive of microfinance could lead to the abrogation of their poverty reduction objectives for profitability.

This study, therefore, introduces a new dimension to the literature on microfinance – with a paradigm shift to understanding the product design and implementation processes and the implications on poverty.

Following these above discussions and motivation, an essential aspect of microfinance that has not been adequately explored is the product design processes and implementation of microfinance. This study seeks to examine how microfinance products are designed and implemented empirically, and the implications for poverty reduction. The study argues that product and implementation designs that reflect the livelihood needs and poverty context of poor clients have the potential to reduce poverty. The researcher believes that some MFIs have often designed their products in one way, while the actual implementation of these products target a different set of clients – not conceived initially. Consequently, this has resulted in a design and implementation gap that needs to be bridged for effective poverty reduction.

1.2 Research objectives

Consistent with the above research gaps identified in the reviewed literature, the central objective of this research is to examine the design of products and the implementation processes of microfinance from an institutional and client perspective; and the implications for poverty reduction.

The following are the specific objectives of the study:

1. To examine microfinance product design processes and their actual implementation from an institutional and client perspective.
2. To assess the effects of various microfinance product components and channels of implementation on poverty outcomes.
3. To determine how MFIs' products and services can be designed to work effectively for the poor; taking demand and supply factors into context.

1.3 Research questions

In line with the research problem and the objectives of the study stated above, the main research question this study sought to answer is: What are the key factors that influence how microfinance products have been designed and implemented in Northern Ghana and to what extent these have impacted on the levels and the nature of poverty of the clients?

The following are the specific research questions, which aim to help answer the main research question:

1. What are the various factors that influence how microfinance products are designed and implemented in rural Northern Ghana?
2. How and to what extent do the various designed microfinance products and channels of implementation affect clients' poverty?
3. What are the implications for designing and implementing microfinance products and services for these to work effectively for the poor in rural Northern Ghana?

1.4 Scope and delimitation of the research

The scope of this research revolves around how microfinance products and implementations are designed from demand and supply-side perspectives. The study was conducted in Jirapa municipality, the north-western part of the Upper West Region of Northern Ghana. A total of six rural and urban communities were involved in the study.

The study involved an analysis of contextual issues that underpins the livelihood choices of clients of MFIs and how to design appropriate financial tools to reflect the context of people. The data from the staff of the three MFIs involved in the study helped with understanding of the institutional perspective while drawing comparisons with information from clients. The study is concerned with the poverty reduction implication of microfinance products. Thus, the selection of MFIs was based on the poverty reduction focus of the institution.

The study's emphasis on contextual issues of clients, households and their communities represents a significant strength of this study since it helps to focus on specificities. Nevertheless, this apparent strength of the study could also constitute a limitation, since its emphasis on specific contextual issues does not make it plausible for the findings to be generalised. The limited geographical scope of this study means that the results can only be strictly generalisable to the context of the Jirapa municipality. The selection of communities for the survey was made to reflect the demographic characteristics of the study area. Selected communities were far apart from each other. The farthest communities from Jirapa central (the capital town) were: Hain (38.5km), Chaperu (35km) and Ping (32.8km).

1.5 Justification of the study

This section summarises and puts into context the justification of this study. The microfinance industry in Ghana is currently going through some form of crises (Boateng et al. 2016). Between the period of 2013 and 2016, well over 100 MFIs with all their branches folded across Ghana. According to the Bank of Ghana (BOG (2019d), in May 2019, 347 MFIs had their operational licences revoked for various reasons – including insolvency and failure to meet the basic banking requirements. Another 39 microcredit institutions also lost their licences due to severe under-capitalisation, poor lending strategies and risk management practices including severe corporate governance problems. Unfortunately, clients of these failed MFIs have either lost significant amounts of their savings, with little or no hope of them getting a full refund. Though the Bank of Ghana facilitated the passing of the Ghana Deposit Protection Act, 2016 (Act 931), it has not been duly implemented.

The recent development in the microfinance sector tends to lower customer confidence. Marulanda (2010) reports that most challenges in the microfinance sector are mainly caused by methodological flaws in product designs, systematic frauds, uncontrolled growth, loss of focus, laxity in regulation and most importantly design flaws. As such, the justification for this study is viewed from the fact that recent trends in Ghana’s microfinance industry stem from these issues discussed above. More importantly, issues relating to flaws in the design of products and implementation of microfinance interventions are believed to have contributed to exacerbating the challenges in the sector. In the account of the above context and research objectives, the significance and justification of this study are viewed from the fact that it contributes to the body of literature on (i) microfinance product design processes; (ii) implementation strategies and effects of clients’ poverty; (iii) research methodology.

The design and implementation of microfinance products and services have mostly taken a ‘one-size-fits-all’ approach (Collins et al. 2010; Kilara and Rhyne

2014). This study challenges existing approaches. It is believed that poor clients have complicated financial lives, and therefore need appropriate financial tools to manage or patch them together (Collins et al. 2010). This study argues that designing microfinance products and services to reflect the diversity of clients' livelihood portfolios and poverty context is useful for sustainable poverty reduction.

The study contributes to the literature on customer-centricity in microfinance – particularly relating to how some components of the Sustainable Livelihood Approach (SLA) and the Making Markets Work for the Poor (M4P) approach can improve product designs for rural and urban clients. Combining these two approaches helps to introduce different perspectives to our analysis and understanding of poverty, and the suitable microfinance tools needed to empower the poor.

Most studies on microfinance have seldom explored how implementation methods are designed and perceived by both clients and MFIs. The study also adds to ongoing debates on how to improve the implementation strategies of microfinance products, especially for individuals, households and groups. It is important to note that, since the introduction of the Grameen Bank in the 1970s, most MFIs, globally, have sought to replicate its implementation model in their operations.

However, standardisation has not been a boon in the current context of market-based microfinance – where products and implementation need to be customised to individual clients' needs. It is believed that the empirical analysis of the various contextual issues and perspectives of both clients and institutions would provide a new paradigm in development thinking on how microfinance implementation models should be designed.

Contrary to (Bateman 2010b; Bateman and Chang 2012), this study presents new empirical evidence to suggest that microfinance continues to hold a promise as an effective tool for poverty reduction. Recent evidence from cross-country data suggests that microfinance directly stimulates economic development and growth (Lopatta and Tchikov 2016), while Mader and Morvant-Roux (2019) argue that microfinance can promote financial inclusion and cause poverty alleviation.

This study, therefore, offers a practical and sustainable approach to making microfinance markets work, especially in the context of rural communities with limited financial inclusion. The new evidence provided in this study contributes to the continuous debate on the role of microfinance in rural poverty reduction and advancing financial inclusion.

Poverty is multi-dimensional. Understanding poverty and the tools needed to fight it should also be viewed from a multi-faceted perspective. However, previous methodological frameworks (Owolabi 2015; Habte et al. 2017) used in microfinance studies adopted one theoretical or conceptual approach to understanding poverty. This methodological strategy limits the scope of understanding of other dimensions in the microfinance and poverty reduction nexus. The novelty in this study's analytical procedure is its combination of different components of the SLA and M4P approaches to decipher the empirical data from respondents.

Last and most notably, addressing the identified research gap mentioned in the problem statement is conceivably the most significant justification for undertaking this research. The findings of this study add to the existing literature on microfinance. It would also help improve the understanding of policymakers in the development spheres, government agencies, MFIs and other stakeholders, on how microfinance product designs and implementation processes should be conceived.

1.6 Structure of the study

The thesis is structured into eight chapters (see figure 1.1). The first chapter represents the introduction to the thesis. It covers the background to the study, problem statement, research objectives, research questions, summarises the scope and delimitation of the study, justifications of the study, as well as the structure of the research.

Chapter two reviews the existing literature on the microfinance landscape. The literature reviewed was consistent with the objectives and sought to establish the gaps that have not been adequately covered or explored in microfinance research.

Chapter three gives a context to Ghana and a summary of essential background information to the study area. It reviews the nature of financial intermediation and microfinance interventions in the Jirapa municipality. Additionally, the chapter gives a brief reflection on the social and macroeconomic environment of Ghana with the view to establishing contextual linkages with the subject being investigated in the study.

Chapter four presents vital methodological issues relating to the SLA and M4P approach that form the basis for the analytical framework of the study. It also focusses on the research philosophy that guided the processes involved in knowledge construction and critiquing. The chapter also delves into the data collection procedures, analysis and presentation, as well as the ethical considerations for the study.

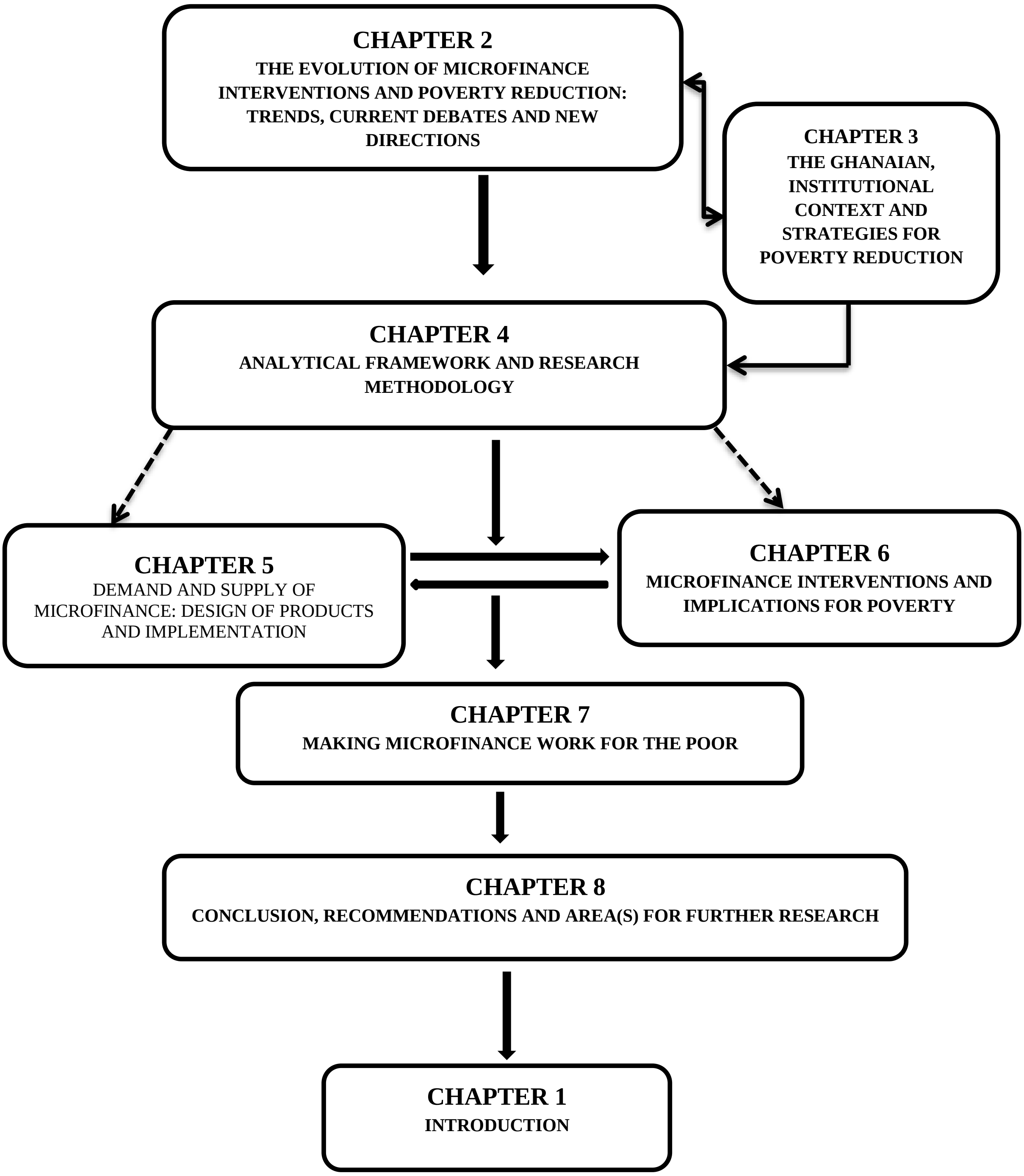
Chapter five, as an empirical chapter, delves into understanding the perceptions of both clients and MFIs in the design of microfinance products and implementations. It captures various contextual issues, livelihood strategies and vulnerabilities of clients, and how they are considered in the product design processes. Other components of the chapter include issues of participation of clients in the product design processes, group formation strategies, as well as the design of savings products. The importance of this chapter is viewed from the fact that it helps to create an understanding of how products and implementation of microfinance are designed from both demand and supply perspectives.

Chapter six is titled: ‘Microfinance Interventions and Implications for Poverty’. This considers the poverty reduction implications of the various products and implementations designed. It looks at how the various contextual and livelihood issues of clients considered in designing products influence poverty. The study aimed to learn from the various products and channels of implementation of microfinance with effective poverty reduction effects on clients as presented in the chapter. Indicators representing household and business outcome (a proxy for poverty) were constructed.

Chapter seven is called ‘Making Markets Work for the Poor’. It delves into two major areas: the core market – representing demand (clients) and supply (MFIs) of microfinance, and rules and supporting functions needed to complement the activities in the microfinance market. The chapter explores how the microfinance ecosystem could be made to work effectively and sustainably for the poor. It delves into the fundamentals of the microfinance market system, particularly exploring the challenges faced by both clients and MFIs, and the way forward.

Lastly, chapter eight summarises the entire thesis, highlighting significant findings captured under each research question. It briefly touches on the contributions of the study to knowledge in microfinance and poverty reduction. Finally, this chapter concludes by expatiating on the limitations of the research and a possible area for future research endeavours.

Figure 1.1 The structure of the thesis and the linkages between chapters



Source: Author's construct (2019)

CHAPTER 2

MICROFINANCE IMPLEMENTATION, RECENT DISCOURSES AND POVERTY REDUCTION

2.0 Introduction

Development encompasses poverty reduction and is often universally understood to represent the intervention of foreign aid and government investment in support of activities that would propel living standards and increase income. This development understanding has legitimised the growth and penetration of donor agencies and non-governmental organisations (NGOs) in developing countries.

Notwithstanding, global poverty is still on the increase. The World Bank opines that nearly 1.2 billion people are living in extreme poverty or absolute terms below the United Nations poverty line of $1.25 per day (World Bank 2010). The fight against poverty has gained tremendous impetus in the development agenda of most developing countries. This chapter explores the changing phases of microfinance in the poverty trajectory and also revisits the leading discourses in the sector. How do the current debates inform our understanding of the product and implementation designs of microfinance for effective poverty reduction?

2.1 Overview of microfinance and poverty

With the current trend of liberalised financial systems, access to financial services has become crucial as access to any public good; relevant for people to fully engage in and benefit from a market-based economy – access to financial services is analogous to access to primary and universal education, potable water and health care (Peachey and Roe 2004; Rutherford and Arora 2009; Esteva et al. 2013).

The past decades have seen poverty reduction and microfinance-targeted credit to poor households and small- and medium-scale enterprises as a monumental pillar to drive economic activities and growth among the poor (Hermes 2014).

Microfinance has emerged not only as a poverty reduction tool but also as an economic development strategy with a bottom-up outlook intended to provide financial services to low-income households. The term is mostly used to mean the provision of financial services that encapsulate savings and credit to clients with low wages, and self-employed individuals (Ledgerwood 2014).

According to Otero (1999: p. 8), microfinance is “the provision of financial services to low-income poor and very poor self-employed people”. The rationale for microfinance is to provide financial access (which includes deposit accounts and loans) to the poor and other individuals excluded from the formal financial sector. Typically, observers view microfinance as a market-based and revolutionary response to poverty that involves a compendium of banking practices modelled to provide microcredits and accept meagre savings (Robinson 2001).

The definition of microfinance in Ghana is investigated extensively by Gallardo (2002a) from the viewpoint of the Central Bank, the BOG. Accordingly, the Non-Bank Financial Institutions (NBFIs) wing of the BOG categorises microfinance as the provision of credit to clients with the capacity to provide individual loans of less than GH¢100 (£19) and GH¢500 (£93) in the event of group-based lending that is usually facilitated through joint liabilities and guarantees from the members of a group. The use of monetary categories to spell out lending types in the NBFIs’ definition can be problematic given the inflationary tendencies in Ghana and those of most developing countries, as rising inflation rates may call for MFIs to revise their loan amounts to support the purchasing power of clients.

There appears to be symmetry in the various definitions of microfinance, for instance, the Consultative Group to Assist the Poorest (CGAP) states that: “Microfinance is often defined as financial services for poor and low-income clients. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as microfinance institutions. These institutions commonly tend to use new methods developed over the last 30 years to deliver small loans to unsalaried borrowers, taking little or no collateral. These methods include group lending joint-liability, pre-loan savings requirements, gradually increasing loan sizes, and an implicit guarantee of ready access to future loans if present loans are repaid fully and promptly" (CGAP, 2010: 1).

Additionally, (Azevedo 2006) expands the definition given by the CGAP and adds that "the term microfinance refers to the provision of financial services for low-income households and micro-entrepreneurs (both urban and rural) for productive purposes" (ibid: 301). Empirically, Azevedo's definition provokes one contentious issue that relates to the fact that microfinance is provided for 'productive purposes' as opposed to the understanding that loans are fungible; hence, credit can be used to smoothen the consumption pattern of clients or used for other 'unproductive' and unintended business purposes.

Similarly, microfinance finance institutions are viewed as agents for aiding intermediary social services such as group formation, provision of financial and managerial literacy training to group members to ensure that capabilities of group members are sufficiently enhanced to facilitate individual wellbeing (Ledgerwood 2014). Typically, microfinance is a critical development tool and does not merely provide banking services for the poor owing to essential activities involved, such as (ibid):

- providing small and microcredits to economically active poor
- conducting investment appraisals of informal borrowers
- facilitating group-based lending in place of collateral requirements
- streamlining the necessary training, monitoring and evaluation that clients need to enable business success
- providing protected deposit or savings accounts

It is also problematic to say that microfinance services are provided only by MFIs as mirrored in the CGAP's definition. Recent developments in the financial sector of many developing countries suggest that mainstream commercial banks and non-governmental financial organisations are actively involved in the microfinance market (Asiama and Osei 2007a). In Ghana, credit unions, and community and rural banks also provide microfinance services with the objective of poverty reduction.

There is, however, a need to draw a dichotomy between microfinance as an institution, and the provision of microfinance as a service by traditional commercial banks. It is empirically incorrect to claim that microfinance services are provided only by MFIs. Currently, it is not uncommon to identify mainstream commercial banks actively involved in the microfinance market. “The founders of microfinance shared a vision. In the desperate settings of Bangladesh, Bolivia, and Indonesia, the vision was to supply formal financial services to poor people shunned by banks because their savings were tiny, their loan demand was small, and they lacked loan collateral” (Zeller and Meyer 2002).

Microfinance has gone through several stages of product and model development to suit the needs of the heterogeneous poor clients that it serves across the developing world. It has always been around in history as a common practice for people to save and take soft credits from people within the context of self-help. The concept became prominent in the 1970s in Bangladesh and expanded across the globe. Since then, the replication of the Grameen model has provided a plethora of financial services (including microcredits and savings) to several poor households, especially women (Asiama and Osei 2007b; Campaign 2012).

Notwithstanding the success and attention given to microfinance, there still exists no evidence to suggest that microfinance programmes have positive contributions, especially to reduce poverty (Armendáriz and Morduch 2010). Proponents argue that microfinance must form part of broad strategies and interventions pursued to reduce poverty in a transformative way (Microfinance Summit 2016).

2.2 Evolution of microfinance: The changing phases in development thinking

The shifting ideological stances and development thinking beginning in the early 1950s presented enormous impediments to understanding how sustainable poverty reduction strategies, particularly microfinance, were theorised and implemented to reduce poverty. Chronicling and conducting a critical analysis of the various poverty reduction paradigms through time offers an understanding on how microfinance was revolutionised in several designs, methods and characteristics; and further, presents a justification for the state of debates in the 21st-century microfinance industry.

The evolving nature of poverty, coupled with evident heterogeneity across geographical regions and changes in development ideas, have played leading roles in redefining and the design and implementation of microfinance services and products. For this review, we identify and critically analyse three main historic strands evident in the supply of financial products to the poor and excluded from the formal financial sector. In the first strand, we revisit the 'government-interventionist' era characterised by the supply of highly subsidised credit to poor farmers; and specifically highlight poverty eradication strategies between the 1950s and 1970s. The beginning of the 1980s marked the emergence of the second strand that prioritised the provision of microcredit by NGOs to poor micro-enterprises predominantly in developing countries.

Finally, and most importantly, we review the third and current strand that recognises the varied and multi-faceted financial needs of the poor that goes beyond mere microcredits to cause the birth of microfinance. This current stage of the development of microfinance presents major arguments around outreach, impact and sustainability of the financial intermediation process with the poor.

2.2.1 The first strand: The period covering the 1950s–1970s

The surge in interest for microfinance as a poverty reduction and development policy direction, especially in the developing world (Africa and Asia), gained impetus from the 1950s through to the 1970s. This was primarily from the agriculturalists' interest groups and proponents of supply-leading finance.

However, Gerschenkron (1962) posits that lending in early 1950 was fundamental to finance large-scale projects in developing and newly independent countries. Most of these projects were state-owned and financed, and were economically modelled along with the soviet style of development. For example, independent Ghana in the late 1950s was a clear case of a state-led investment into development projects in the areas of agriculture, industries and education; all spearheaded by the then president Dr Kwame Nkrumah who pursued a socialist system of government consistent with soviet economic ideology.

From the perspective of the agriculturalists, rural peasant farmers were penurious due to the inadequate access to credit to support rural agriculture; hence, there was a need to provide subsidised credit to increase yields. This new phase of development thinking provoked research interest in the role of subsidised credit in advancing rural agricultural activities across developing countries.

In India, the push for subsidies was inspired by landmark research known as the 'All-India Rural Credit Survey'. This study was spearheaded by the Reserve Bank of India, which established that rural moneylenders were the primary source of credit to the poor rural farmers, yet the practices evident in high interest rates militated against the interest of farmers and were thus viewed as counterproductive (Ayyar 1956). Wai (1957), analysing interest rates, also contributed to the enormous acceptance of subsidised rural credit. Wai's study explored non-institutional sources of agricultural and rural credit as the leading determinants of the cost of finance. The main focus area was the high interest that informal moneylenders charged.

The impetus on the interest rates debate spanned into the 1960s, encouraging a lot of academic research activities. Leading publications by (Bottomley 1963; Bottomley 1964) unravelled the components of the cost involved in determining the value of capital (interest rates) which encapsulates: risk factors, administration and sunk costs, and including monopoly costs. In Bottomley's analysis, these components played a significant role in the high interest rates charged by informal moneylenders on credits provided to rural farmers and other poor households.

Despite the clear monopoly gains to informal moneylenders, formal banking institutions appeared disinterested in providing financial services to the informal sector; as positioned by Amogu and Amogu (1956) in the case of Nigeria, as a result of asymmetric information. Owing to the neglect of the informal sector in the provision of credit and consistent with the development thinking at that time, a government interventionist approach to subsidise rural microcredit to support agriculture was thus promoted across most developing countries (Robinson

1994).

The late 1960s and beginning of the 1970s witnessed the deepening of this development thinking, spurred on by the rapid proliferation of new and high yielding varieties of rice and wheat marking the emergence of the green revolution and its concomitant need for financing of new agricultural technologies and inputs. This created a new borrowing need at the rural and individual level, as previously, households sought funding basically for smoothening consumption and emergency purposes. In the 1970s, however, rural agriculturalists began to borrow to finance the agricultural production expenses that came with the green revolution (ibid: p. 31).

The prioritisation of economic development and poverty reduction by governments and combined obligation of the international donor community to substantially invest in the agricultural sector of countries in the global south resulted in a global appeal towards subsidised agricultural credit policies. The result of such policies was a flow of substantial levels of subsidised agricultural credit to rural agriculturalists groups to increase farm yields while improving equity in the access to credit (Mears 1981). The theoretical foundation for this development strategy was hinged on supply-leading finance theory and gained significant attention in the 1970s, mirrored in three fundamental assumptions (Robinson 1994: 31): "(a) that rural areas of developing countries are critically important for national development; (b) that it was essential for economic growth that the new agricultural technologies be adopted rapidly and extensively; and (c) that the latter would frequently require substantial credit subsidies, since it was believed that most farmers would need more capital than they could save".

The interventionist approach by governments and the donor community was considered critical, mainly due to the palpable lack of appetite on the part of private financial institutions to provide lending to rural informal borrowers. The strategy also gained influence, as it was believed that subsidised credit to farmers would help bridge the rural-urban inequality, drive wealth redistribution and ultimately reduce the general disparity in poverty. However, this development strategy did come with a myriad of operational weaknesses (evident in politicisation of credit, lack of monitoring, moral hazards issues and lack of entrepreneurial skills) that led to failure of the subsidised credit programmes to achieve its objectives in most developing countries (Adams et al. 1984; Adams and Vogel 1986; Braverman and Guasch 1986; Brownbridge and Gockel 1996; Khwaja and Mian 2005).

The failure of state-directed and subsidised credit programmes marked the emergence of new and innovative credit delivery mechanisms deemed efficient in reaching households' credit needs with little government interference. These new lending programmes were group-based with embedded joint-liability characteristics that reduced transactional costs and also addressed the known challenges of the previous rural credit system backed by governments (Zeller and Meyer 2002). The failure of this paradigm spearheaded by supply-leading finance puts forward the weaknesses of this theory, especially in applying to poverty reduction. Mobilising idle capital from surplus sectors or units of the economy for efficient and productive investment purposes might sound like a brilliant approach to reduce poverty, but, credit alone cannot work magic. As the empirical results from Chowdhury (2009); (Banerjee et al. 2013) have shown, the poor (that represent the demand side of MFIs) need other complementary services to credit to be effective.

2.2.2 The second strand: Microfinance gaining traction (1980s–1990s)

The 1980s witnessed the intrusion of neoliberal ideas across the global economic landscape; as a result, local credit markets in developing countries needed to reform from the hitherto Keynesian economic doctrine of state-led to a market-led system of credit allocation (Yaron and Mundial 1992).

The beginning of this new development paradigm also marked the growing body of knowledge on the nature and intricacies of poverty. This marked a departure from the 1980s' understanding of the poor as a cluster of male-headed households of peasant farmers (Dallimore 2013). Consequently, the discourse from this point shifted towards supporting the entrepreneurial poor and the activities considered economically productive to both the financial institutions and the borrower (Matin et al. 2002). Some institutions during this period under review adopted a gendered approach to microfinance by focusing on financing and empowering economically active women (Berger 1989). The change also characterised the migration from supply-led to demand-driven allocation of microcredit for entrepreneurship with emphasis on the role of women in local economic transformation, and the development of microenterprises (Matin et al. 2002).

The period marked the emergence of a number of non-bank financial institutions, such as: Grameen Bank in Bangladesh; the Fundacion para la Promocion y Desarrollo de la Micro Empresa (PRODEM) in Bolivia; the Asociacion para el Desarrollo de la Microempresa (ADEMI) in the Dominican Republic; and the Badan Kredit Kecamatan (BKK) in Central Java Indonesia (Robinson 1994). These organisations demonstrated that microcredit could successfully and profitably reach poor households, unlike the previous state-directed credit programmes to the agricultural sector.

The Grameen Bank model[3] has been globally replicated in most developing countries. The method of implementation was to distribute microcredit through a joint-liability approach and mainly targeting women (Yunus 2003). MFIs in most jurisdictions across the world began to support women because they were the worst affected by poverty; as the International Labour Organisation (ILO) says: "Seventy percent of the world poor are women. Traditionally, women have been disadvantaged in access to credit and other financial services. Commercial banks often focus on men and formal businesses, neglecting the women who make up a large and growing segment of the informal economy" (ILO 2008: 2). Khandker (1998) reported that the Grameen Bank and BRAC in 1994 had 90% and 88% of their entire client base being women respectively, because women had a loan repayment rate of 90% and also because in many instances loans to women had more impact than their male counterparts.

The Grameen-style approach was seen to be capable of mitigating the consequences of moral hazards arising from asymmetric information, and thus, received numerous positive assessments (Huppi and Feder 1990; Wenner 1995). However, research into the operations of a Grameen 'cloned' lending approach in Malaysia, Sri Lanka and Malawi posited that the management and organisational structure of MFIs explained more about the success of lending programmes rather than lending policies; the reason being that enhanced

[3] Prof Mohammed Yunus founded the Grameen Bank Model

management capacity contributed to effective monitoring and provision of the requisite training services to complement loans to the poor (Hulme 1990; Jain 1996).

It is essential to mention that some of the defining discourses surrounding contemporary microfinance gained prominence in the 1990s, where many commentators on microfinance began to argue the poor should be viewed as commercially viable clients rather than a social cluster of beneficiaries (Jackelen and Rhyne 1991). The trajectory, at this point, was an urgent need to move towards inclusivity of the poor in the financial system as users of financial services that go beyond microcredits to encapsulate even savings provided by a market system that recognises the needs of the poor.

The early days of microcredit proliferation in the developing world enjoyed huge donor attention as most institutions providing credit were registered as non-profit Financial Non-Governmental Organisations (FNGOs). Arguably, the success of the Grameen Bank owes a great deal to grants from multilateral institutions, donations from individual philanthropists and foreign aid from developed countries, which contributed to its impressive outreach to many rural borrowers in Bangladesh. The idea of giving subsidies, first to microcredit institutions like the Grameen Bank, also sparked the argument that subsidies to some banks made it difficult for new institutions without subsidies to compete with the status quo (Morduch 1999). Another key interest area during this period under review was concerned with the nexus between poverty and poverty reduction, and the space occupied by microcredit.

This period saw a surge in scholarly contributions on how poverty should be defined and measured, and how changes to these measurements can be tracked either from the perspective of the poor being an urban female street hawker, rural or urban farmer or a male-headed household. The main concern was whether microcredit could play a leading role in the poverty reduction crusade relative to previously failed development interventions such as the subsidised and directed agriculture credit supported by governments (Wright 1999b; Zaman 1999). Hulme and Mosley (1996a) conclude that the inability of most programmes to have an impact on the poor is due to the treatment of the poor as a homogenous group.

Some microfinance programmes also place emphasis on credit disbursement rather than providing a wide range of financial services that include savings, insurance and other financial services.

What remains unclear is whether market-led approaches to microfinance are more useful for poverty reduction than government subsidies, given the nuance of profitability embedded in market systems and the related politicisation of government poverty reduction interventions.

2.2.3 Microfinance point of departure: Recent development in microfinance (from the 2000s–present)

The period of departure for microfinance is described as the contemporary nature of microfinance. This period is occupied with debates that highlight that microfinance should look beyond credits to cover micro-savings, micro-insurance and other financial services.

The recent sprouting of microfinance publications such as (Stuart 2000; Collins et al. 2009; Banerjee and Duflo 2012) are dedicated to understanding the poor, their coping mechanisms and the role of microfinance services in the development landscape in the global south. The treatise published by Stuart (2000), titled: 'The poor and their money', illuminated the many avenues – hitherto unknown – in which the poor managed their financial resources amid difficult circumstances evident in the informal markets. Stuart's work sought to challenge dominant orthodoxies in the informal financial sector that support savings and credits (Rotating Savings Credit Association (ROSCA), savings clubs, susu collectors) to suggest a new paradigm for understanding the nexus between savings and loans from the perspective of the poor.

Accordingly, Stuart coined his argument on savings and loans around two terms: 'saving-up' and 'saving-down'. Stuart's argument suggests lending involves receiving large amounts of money upfront, counterbalanced by the promise of future repayments. This is essentially the opposite of saving that encapsulates putting aside smaller amounts of cash now to build up a future lump sum. Applying a similar analogy to understand how the poor use insurance tools, he clarified that insurance entails putting aside smaller regular payments to draw down on an unspecified date in the future. Stuart's treatise offered one of the most insightful and intuitive understandings of how poor people manage their financial resources and the kind of financial tools they may need in the 21st-century microfinance market. Stuart's arguments suggest that financial tools, such as safe depository services for the poor to save their money, insurance services, transfers and payments services, and including training, are quintessential for microfinance clients.

Some researchers have also made arguments to the effect that the non-availability of apt micro-savings accounts and insurance portfolios to help the poor manage their exposure to shocks have negative implications for poverty reduction (Karlan et al. 2014; Prina 2015). As with credit, savings can also facilitate in smoothening consumption and enable poor individuals and households to save their surpluses in order to draw on them during a crisis; this is by itself, the pooling of risk (Rutherford 2000; Matin et al. 2002; Christen and Mas 2009). Similarly, Rutherford (2000) made strong arguments in favour of credit and the poor, stating that savings enable households to adequately address some of life's pressing priorities (paying children's tuition fees and attending life cycle events: weddings, funerals and festivals).

The work of Collins et al. (2009), titled: 'Portfolios of the poor: How the world's poor live on $2 a day', is credited with being one of the empirically rigorous studies on contemporary microfinance, which used 'financial diaries' of poor people in three countries: South Africa, Bangladesh and India. This empirical work gives an exposition on the daily grind of the poor, presents issues of dealing with the risk associated with poor people and also ways of developing better portfolios for the poor. It also highlights the importance of small and frequent transactions applied in the daily money management of the poor. The poor are often saddled with low incomes, mostly patched together from uncertain sources resulting in: "a triple whammy of incomes that are not just small but also irregular, and that has to be managed with financial instruments that do not always fit the household's cash flow patterns" (Collins et al. 2009: 31).

Issues regarding microfinance sustainability, depth and outreach have also gained equal importance in microfinance discourses, especially given the reducing donor commitment in the subsidisation trajectory. This new trajectory in contemporary microfinance advocates that transformation or commercialisation would expose MFIs to varied sources of funding (both debt and equity) thereby overcoming its over-reliance on donor funding and helping to achieve massive outreach (Christen and Drake 2002).

The debates around the transformation of MFI from their previous welfare or NGO status to market-oriented entities have generated a considerable level of academic and policy interest. Critics contend that the commercialisation of MFIs has a high tendency of shifting focus from poor clients to the rich as evident in the case of PRODEM changing to BancoSol (Rhyne 2001). In Rhyne's study of BancoSol, to dichotomise the rhetoric from its actual implementation, the study established a mission drift from their original objectives to practise as a commercial bank. Accordingly, "BancoSol has decided to enter a more upscale market, but senior managers argue that this involves the addition of new markets, not a subtraction from the original focus of helping the poor" (Rhyne 2001: 162).

However, what remains clear after a review of Hishigsuren (2007) work on mission drift is that MFIs shift in attention to non-poor clients has negative implications on performance for poor clients. The review of the literature over the various strands on the evolution of microfinance shows how the development of microfinance reflects the changes in development thinking over time. Microfinance debates and strategies for implementing the objectives of MFIs are continually changing. Most current debates on microfinance and poverty have been predominantly linked to assessing the impact of microfinance interventions rather than examining how financial tools should be designed and implemented.

2.3 Dominant discourses in the microfinance literature: Credit and savings

This section of the review sheds light on the dominant debates that have occupied a critical part of the literature on microfinance and development. For this purpose, we identify two major areas (approaches) that have seen huge scholarships: credit-first or minimalist approach, credit plus approach and the financial integration approach. The credit-first approach is the oldest and strongly advocates the enhancement of the abilities of the poor by way of provision of credit to individuals and households to support their micro-enterprises. The financial integration resonates with contemporary development on how poor individuals and households manage their financial resources using instruments.

2.3.1 Credit-first approach

Access to finance that covers the full spectrum of financial products and services that encapsulates bank deposit accounts, credit, mortgage, remittances and other money transfer services has increasingly been seen as a precondition for development (Arora 2014). According to Von Pischke (1991: 27), "finance, in the form of savings and credit arises to permit coordination. Savings and credit are made more efficient when intermediaries begin to transfer funds and are willing to shed liquidity, to those that desire to acquire liquidity".

Credit arises where surplus units transfer their excess or unused credit to areas of deficit for gainful economic purposes; as a result, MFIs have leads in facilitating such intermediation processes with the view to reducing poverty with credit access. Credit is described as borrowed money with agreed-upon repayment terms; this arises when an individual or household has inadequate accumulated savings to finance an enterprise or smoothening consumption and where it is the business case that expected returns on a venture outstrip the interest payment on a loan (Duval and Waterfield 1996b).

As indicated earlier, credit represented a unique selling proposition in making a case for poverty reduction or other development in the 1950s with state-directed lending to the rural agriculturalists. The assumption was that the lack of access to credit hindered agricultural industrialisation from the periphery (GERSDORFF

1960). This line of thinking with ideological leaning from supply-side finance gained currency out of the belief that poor farmers in the peripheries were unduly exploited by their local creditors (moneylenders), described by Bhaduri (1977) as ‘usurious’. The understanding that resonated with this earlier line of thinking was that credit was the ‘only panacea’ to the challenges that plagued development or other poverty reduction. The assumption was that this could be actualised by providing credit with or without augmenting other supporting services such as marketing, training, provision infrastructure and agricultural pricing policies in the cases of India (Jena 1956) and Zambia (Harvey 1975).

Financial services from formal banks in several countries, including India (Copestake 1988), Tanzania (Furness (1975) and Ghana (Aryeetey et al. (1994) were either nationalised or, in the case of Ghana, establishing a new specialised agricultural lending bank (ibid). While in some jurisdictions, commercial banks were compelled to extend credit to farmers in rural areas (Anyatonwu 1983). The resultant effects of such an intervention were a massive failure, owing to apparent political meddling and high default rates emanating from the misconception that subsidised credits were grants (Adams et al. 1984). In the case of Ghana, the setting up of national banks accompanied with branch expansion to rural areas, and the partial acquisition of some foreign banks (like Barclays and Standard Bank) was intended to make credit and savings available to unbanked clients (Brownbridge and Gockel 1996).

The consequences for this action were that banks (mostly state-owned) got into liquidity problems resulting from bad and non-performing loans that were advanced to government-directed ‘priority sectors’ of the economy. As Brownbridge and Gockel (1996: 8) note: “corruption and fraud contributed to the scale of the banks’ losses with politically connected borrowers being able to access unsecured loans which would not have been given to them on commercial grounds and to avoid pressure to repay. During the Acheampong regime in the 1970s, loan applicants obtained notes from military officers and took these to bank managers: If the manager did not comply he risked being sacked over the radio”. Also, Khwaja and Mian (2005) conclude that rent-seeking and politically connected borrowing from government banks in Pakistan and the concomitant high loan default appear consistent with the findings of Brownbridge and Gockel (1996) in the case of Ghana. Similarly, La Porta et al.

(2002: 265) conclude that “higher government ownership of banks in 1970 is associated with slower subsequent financial development and lower growth of per capita income and productivity”.

However, Adams et al. (1984); Brownbridge and Gockel (1996); Khwaja and Mian (2005) spoke of the failure of national banks emanating from politically connected or targeted lending programmes witnessed at a cross-country level. Burgess and Pande (2003) conclude in their study that nationalisation of banks in India and subsequent implementation of the 1:4[4] bank licensing policy did result in poverty reduction in the previously unbanked areas leading to the implementation. The policy required that for every one bank branch in a banked locality, the bank was required to establish four branches in unbanked localities. The bank branch expansion drive also led to increased savings mobilisation and credit allocation in the rural localities.

The nature of government influence in the credit market through subsidies raised some issues of concern. A critical inquest looked into whether these interventions failed because they were subsidised credits or whether they lacked the complementary services as posited by Jena (1956), and what forms of lending arrangements work effectively for the poor? The underlining factor of the above-espoused issue relates to the fungibility of credit – implying that loans approved for identified business ventures could still be diverted for other unintended purposes by the service user. Most MFIs have attempted to tackle the issue of moral hazards resulting from credit fungibility through advancing credit to support economically gainful activities of the poor and support by regular monitoring and evaluation from a loan officer.

However, in reality, moral hazards arising from the fungibility of credit would always linger in both formal and informal credit arrangements; the concern should be whether clients are able to meet their loan obligations. Mosley and Hulme (1998) contend that MFIs must view the fungibility of credit as borrowers’ strategy of gaining high benefits from loans acquired. For example, if a microfinance client identifies a new business opportunity with much higher expected return it would be a compelling business decision to invest borrowed

[4] The 1:4 bank licensing policy was implemented by the Central Bank of India from 1969 to 1990, and sought to compel bank branch expansion to unbanked areas.

funds in such a venture; albeit that might not be the original purpose for the credit. In effect, the sober, reflective inquest could be that: how should an intervention from an MFI be modelled and what are the implications for poverty reduction?

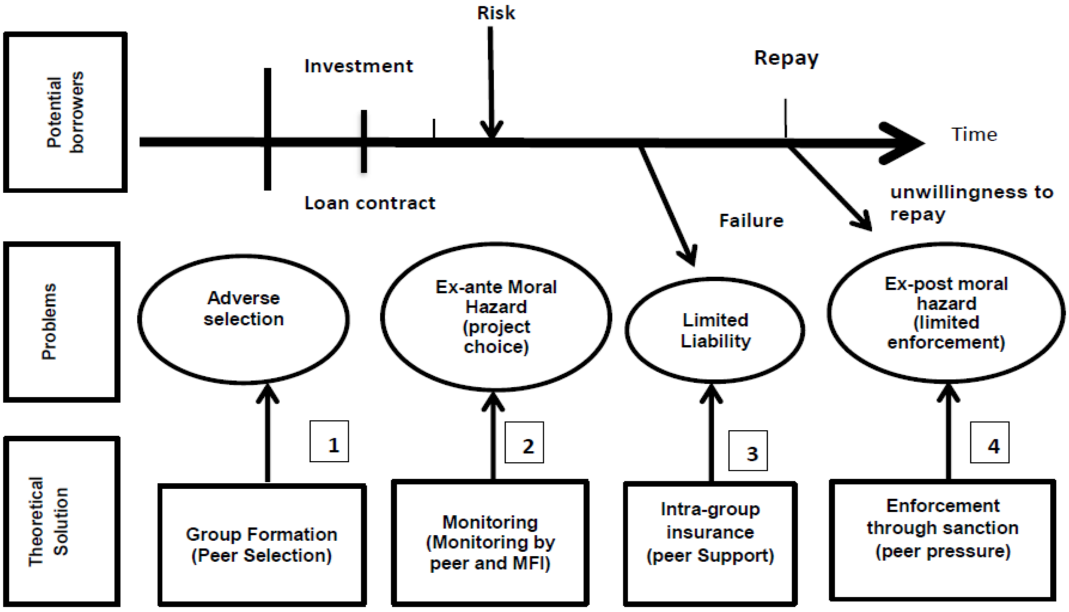
2.3.1.1 Microfinance credit implementation strategies

Most microfinance models currently being implemented in Africa are cloned along with Asian models, raising concerns about the generalisation of poverty across regions with unique socio-cultural features. Because poverty is multi-faceted, it is appropriate for poverty reduction intervention strategies to be designed along with the characteristics of the individual or household clients of MFIs.

2.3.1.1.1 Group-lending model

Group-based lending is perhaps one of the earliest lending criterions used in microfinance interventions like the Grameen Bank, BancoSol and BRI. It involves the establishment of groups of people who share a similar business industry and social networks. The design of most group-lending methods usually mimics the traditional informal lending and savings groups (Ledgerwood 2014). Group-lending methodologies are viewed to be effective at mitigating the risk associated with information asymmetry and transactional cost. “Group lending refers to the practice of working with clients in small groups (typically comprised of three to seven neighbours). Loans are made to individuals, but the group is held jointly liable should repayment difficulties arise” (Armendáriz de Aghion and Morduch 2000: 2). The figure below adumbrates the challenges of loans with joint liability clauses and four staged sequential solutions.

Figure 2.1 Dynamic joint liability lending model



Source: Reconstructed from (Simtowe et al. 2006)

According to Matin (1997), a joint-liability lending arrangement is a contract whereby the supply of a private good, that is an individual borrower having to access credit, is tied to a condition of providing the public with a good; such as an agreement of a group repayment of the credit (joint liability). Under this arrangement, two or more borrowers are jointly responsible for the settlement of a credit obligation, either individually or jointly compensating the creditor. In most developing countries group loans are primarily structured with joint liability clauses in place. This partly explains the widely held understanding that joint-liability contracts potentially contribute to economic empowerment of the poor through adequate access to credit. For example, the poor do not have land titles (De Soto (2000) or other collateral security (Hulme and Mosley (1996a) to enable them to access credit individually.

From the above figure, four staged theoretical and sequential solutions (peer selection, monitoring by peer and MFI, intragroup insurance and enforcement via peer pressure) are presented to help address the challenges (such as: adverse selection, ex-ante moral hazards, limited liability and ex-post moral hazards) embedded in lending schemes that are accompanied with joint-liability clauses.

1. *Peer selection*

The first step of every credit contract – either at the formal or informal credit markets – usually begins with the selection of the prospective borrowers from a pool of applicants. In both credit markets, selecting a creditworthy borrower can always be a daunting task, as there is a tendency to select the wrong applicant, termed as adverse selection. However, with this arrangement, a borrower's affiliation with a group is a necessary condition for accessing credit from an MFI. Because access to credit is dependent on group membership and its related joint-liability obligations, each member (borrower) tries to match their risk tolerance with other group members with similar risk characteristics, through peer selection.

Ghatak (1999a) summarises that peer-selection at the initial stage of the loan contract helps to reduce the problem of adverse selection before the investment period (loan given out by the lender). Ghatak (1999b) argues that by means of an "assortative matching process", groups are able to 'self-select' borrowers (members) that are less risky, hence, directly helping to reduce moral hazards; lowering the interest rate charged by lenders and consequently resulting in a 'pareto superior outcome' compared to individual lending.

2. *Monitoring group members and staff of MFIs*

This second stage covers activities involved in the investment stage, taking into consideration the problems that come with this and how joint-liability clauses in loan contracts help to mitigate such issues. At this phase of the lending process, the creditor is faced with the challenge of ex-ante moral hazard. This type of moral hazard arises when the borrower decides to commit the borrowed funds into risky investment projects, misapplies the loans or is negligent in the management of borrowed funds. In theory, however, ex-ante moral hazard-related problems can be resolved through peer-monitoring of the investment activities of group members complemented by staff monitoring from the MFI (Simtowe et al. 2006).

3. Intragroup insurance – assistance from group peers

This stage of the credit arrangement relates to the outcomes from the investment activities of borrowed funds and the associated problems arising from project failures due to idiosyncratic risk. In theory, where a group member is unable to repay a loan due to factors on undiversifiable risk, the joint-liability clause in the contract becomes a source of insurance, obliging other members of the group who do not face challenges in repayments to aid in defraying the loan (Simtowe et al. 2006).

4. Enforcement by way of sanctions and peer pressure

The last stage of the process that relates to enforcement and penalties arises when borrowers diverge returns from their investments to other projects to avoid repayment of borrowed funds even when they are due. This problem is termed as ex-post moral hazards and is better resolved through enforcement of the loan contracts by the members of the group because of the joint-liability clause embedded in the contract. Just as evident at the initial stage of the contract, characterised with peer-selection of members, the last stage also involves the use of peer pressure to prevent or mitigate post-investment problems (Ahlin and Townsend 2003).

This model has attracted some considerable level of interest from economic theorists who have mainly been concerned about how group-based lending, and almost all the economic activities of microfinance, work based on the incentives encouraged by joint liability in group contracts (Armendáriz de Aghion and Morduch 2000).

The group-based lending method takes and modifies the design of ROSCAs to ensure flexibility in the structure and size of loans, and to ultimately allow borrowers to access funds when needed instead of waiting for their turn as evident in the traditional ROSCA model.

The Grameen Bank and ACCION International both pioneered and facilitate the formation of solidarity groups (between five to ten members) and advance individual loans to these members.

The Foundation for International Community Assistance (FINCA) village-level banking model has much more extensive group sizes ranging from 30–100 people, with lending going to the entire group rather than individuals within the group (Ledgerwood 2014). What this implies is that it is incumbent on the group leader to facilitate the sub-disbursement of credit to members of the group based on the individual needs but within the group's credit limits and requirements.

Proponents of group-lending contend that the self-selection feature embedded in group formation is vital in ensuring group cohesion since members have good knowledge of each other and self-regulate each other's credit behaviour through peer monitoring. The essence of group lending is to ameliorate the risk associated with individual loan defaults. However, there have been debates around decoupling joint liability from group-based lending (De Quidt et al. (2014), suggesting that eliminating joint-liability clauses in credit contracts does not affect repayment rates (Giné and Karlan 2014). In this context, we argue that, given that credit is fungible, joint-liability contracts are restrictive and do not allow group members to commit their loaned funds to alternative investments with high returns.

Critics have argued that the cost of monitoring group members and participating in group meetings can be exhaustive and time-consuming, especially when group members live in spatial communities. Others have argued that there are tendencies for group members to collude against MFIs, thereby debasing the ability of microfinance to harness 'social collateral' (Besley and Coate 1995; Armendáriz de Aghion and Morduch 2000).

2.3.1.1.2 Individual lending model

The rise of individual lending methods in the microfinance market comes from some of the setbacks of group-based lending. When businesses of members of a group grow, their credit demand might also increase and require more extensive loan portfolios that cannot be serviced through the mechanisms of group-based lending; as such, an individual might be more appealing to more clients (Ahlin and Townsend 2007). Madajewicz (2011) agrees with Ahlin and Townsend's theoretical analysis that clients tend to prefer individual lending to group-based lending as their economic status improves. In the opinion of Giné et al. (2006); (Giné and Karlan 2014), the demand for credit within a group-based lending structure is subject to change with time. This is because, as the lending behaviours of some group members change, it compels borrowers with much smaller loans to be liable to those with large loan portfolios. For example, if some borrowers, especially those that demand substantial credits within the group, start to delay repayments, the effects are felt by smaller borrowers as well. Consequently, most MFIs are beginning to prefer individual lending.

A well-elaborated benefit of individual lending over group lending is put forward by (Armendáriz de Aghion and Morduch 2000) to the effect that the latter mounts relentless social pressure on peers to meet their loan obligations to MFIs as observed by the duo in Russia and Eastern Europe. However, in a somewhat contrary argument, Pouillot et al. (2007) tend to be dismissive of the personal guarantee mechanisms embedded in individual credit lines with the influential viewpoint that those guarantees would only be meaningful if an individual has assets to pledge surety. However, the imperative in such an arrangement is whether the institutional and legal framework of a country supports the actual transfer of 'collateralised assets' of borrowers to creditors in the event of default. A case in point is the legal and judicial framework in Kenya, believed to be rigid, with a backlog of pending cases, this clearly can affect the timely transfer of collateralised assets to creditors (Kodongo and Kendi 2013). Under such dispensation, group lending might be preferred by the institution.

Given the above thesis on group-based and individual lending, there appears to be no clear-cut lending method ideal for all microfinance lending programmes; an MFI lending programme, in principle, might be influenced by the firm's philosophy. "The different features of the group and individual lending schemes have not yet been studied in detail despite being a question of first-order importance" (Giné et al. 2006: 1).

The review of the literature reveals that provision of microcredit is anchored on three philosophical debates: the first argument is centred on an institutional approach; this posits that MFIs that go by this philosophy have credit programmes modelled with importance attached to attaining institutional sustainability. For example, for MFIs designed along this line of thinking, their preoccupation would be how the operational cost can be fully covered with the MFI's operating revenue.

Conversely, the second argument is the reverse of the first; it is viewed as the welfare approach, which postulates that MFIs can be financially sustainable without necessarily attaining financial independence. The last philosophical argument is termed as the ‘win-win’ approach; this attempts to find the right balance between the traditional mission drift of poverty alleviation and attaining sustainability through financial self-sufficiency by an MFI (Armendáriz de Aghion and Morduch 2000).

Financial sustainability to this point occupies an essential part of the microfinance discourse; it refers to the MFI’s capacity to generate funds from its operations to cover or finance all its operational cost or expenses (Thapa et al. 1992). Financial sustainability somewhat guarantees the continuity of a microfinance intervention. When financial services are delivered sustainably, this can lead to a reduction in the cost of transactions and allows the provision of better services to more clients according to their needs (CGAP 2004; Dutta 2016; Sheremenko et al. 2017).

The process of achieving financial sustainability suggests that MFIs pursue some implementation channels that reduce the cost of transactions and the risk of loan defaults. For example, some MFIs may choose to offer group lending with the view of addressing issues of moral hazards and reducing the cost of transactions. However, debates remain in the literature as to whether contemporary MFIs can maintain a balance between financial sustainability MFIs and poverty reduction in the framework of design and implementation of credit programmes. It is vital to ensure that the various terms and structures of microcredit and other financial tools are imbued with the needs of clients and are financially sustainable from the perspective of MFIs.

2.3.2 Savings and the poor

There is a long-standing controversy surrounding savings mobilisation by MFIs. This has since seen heightened popularity recently among policymakers about the prevalence of informal schemes such as credit unions and ROSCAs that are concerned with deposit mobilisation among the poor. This trend reveals two compelling pieces of knowledge about the fact that, firstly, the poor can and do save, and secondly, show the complementarity of savings with traditional microcredit for effective poverty reduction (Ledgerwood 2014). Savings are often viewed as making sacrifices of present consumption, as driving the process of accumulation of capital needed to facilitate the production of additional outputs with the potential of supporting consumption in the future; in effect, savings enable capital formation, which drives growth (Gersovitz 1988).

Savings were regarded as the "forgotten half of financial intermediation", as they are scarcely discussed in microfinance in comparison to the subject of credit (Vogel 1984; Fiebig et al. 1999). To others, they represent one of the concepts in the poverty reduction agenda that lacks detailed empirical understanding of its nexus with income and wealth creation (Dallimore 2013). There has been a traditionally perceived bias towards microcredit with little scholarly attention devoted to assessing the role of savings on poverty alleviation. However, it would be inconclusive to discuss poverty without combining the effects of facilitating the accumulation of excess resources in the form of savings (Richardson 2000).

Savings play an essential role in the economic lives of people and the broader economy. Harrod (1939) and Domar (1946) suggest that for developing countries to realise growth there is a need for governments to develop policies that encourage savings. The Harrod-Domar Model (HDM) assumes that a lack of economic growth is a result of a lack of capital, and mobilising savings is a way of building a stock of investible capital. The model assumes savings are synonymous to investments, and precisely, the investment would lead to capital-output, which would then be used to smoothen consumption. What then happens if domestic savings are not adequate to drive growth?

From the perspective of an endogenous economy, it makes economic sense to galvanise domestic savings for investment. However, one of the problems with the model from an exogenous perspective is the tendency of governments to get into perpetual debt because of borrowing heavily from outside the economy to build up the required savings for investments. Post-development theorists like Escobar (1992); Esteva et al. (2013) critique that efforts from western countries to bring about development have failed, as most of the policies are either counterproductive or exploitative. They suggest that development should be a concerted effort from within the economy and not from outside.

It has always been challenging to comprehend how and why the poor who can scarcely support their daily grind manage to save. The work of Collins and his colleagues concludes that "one of the least remarked-on problems of living on two dollars a day is that you do not literally get that amount each day. The two dollars a day is just an average over time. You make more on some days, less on others, and often you get no income at all. Your greatest source of support is your family and community, though you will most often have to rely on your own devices, how do you manage your money if there is so little of it?" (Collins et al. 2009: 2).

2.3.2.1 Why do the poor save?

Despite the glaring lack of financial resources to support the daily livelihoods of the poor, they do indeed have a myriad of compelling reasons to want to save. The poor commit to savings because it would serve as a cushion against bad events such as illness and poor harvest (Banerjee et al. 2011). It is understood that the poor save up small and irregular cash streams to support livelihood activities, including consumption smoothening resulting from the seasonality of livelihood activities and employment (Johnson and Rogaly 1997; Vonderlack and Schreiner 2002). Encouraging the poor to inculcate the habit of savings not only cushions the poor against their vulnerabilities to livelihood shocks but also stands to help finance subsistence agricultural activities that mostly require lump sums beyond the available daily money (CGAP 2001;(Nikoloski et al. 2018). Similarly, it is believed that promoting a savings culture among the poor, particularly vulnerable women, improves their ability to cope with adverse shocks (Dizon et al. 2019).

Rutherford and Arora (2009) state that the overarching reason why the poor need savings can be explained by what they describe and categorise into three as (i) life cycle events (i.e. childbirth, marriage, festivals); (ii) emergency needs, such as: death, famine, floods, sickness); and (iii) investment opportunities (i.e. finance for agricultural implements, acquiring land). Rutherford and Arora further argue that there are three pathways to savings that include:

1. Saving up – this is perhaps the most accessible way to convert little and irregular savings into lump sums to smoothen future consumption

and investments. Most people living in poverty prefer this mechanism because the money accumulated is theirs as compared to contracting a credit. The demerit of this type of savings mechanism is that the poor as a usual constraint in accessing safe places for their money, hence, the need for MFIs to fill the void.

2. Saving down – this savings mechanism is inversely related to saving up; with saving down, the saver does not need to reserve small lump sums into the future, but rather secure the lump sum in the form of a loan and then pay it off through savings over time. The challenge with this method has to do with the cost of capital that a moneylender applies to such lump sums loaned out, and whether the borrower's intended investments will generate higher returns.

3. Saving through – this mechanism of savings is better understood from an insurance policy perspective, where the poor client or saver makes more or less frequent cash streams in order to guard against any unforeseen contingency. Most savers who engage in this model, find themselves in groups and savings clubs, which a member could fall back on in an emergency.

Some empirical studies have sought to establish why the poor save. Maloney and Ahmed (1998), in a study conducted in Bangladesh, found that the primary objective for saving was to acquire land, followed by the aim of guarding against unforeseen contingencies. In a study in Uganda, Deshpande et al. (2006) concluded that 57% of their respondents alluded that access to a savings portfolio with a secured financial institution was more preferred to access to credit.

As queried earlier, it is essential to know how the poor save in informal structures; knowledge of that would support the efforts of MFIs to develop products and services that suit their uniqueness. The poor are a heterogeneous group of individuals with different challenges and coping mechanisms; hence, they require products that best address their underlining challenges and causes of their poverty. In Uganda, savings in the informal environment consist of assets such as livestock land and grains; participation in ROSCAs, Accumulating Savings and Credit Associations (ASCAs) and other forms of savings at the family and household level that include using money guards (Deshpande et al. 2006). In other separate studies undertaken by Wright (1999a) and Vonderlack and Schreiner (2002), both studies established symmetric findings, in the savings culture of the poor people sampled. Both studies agreed that the poor in some cases keep cash at home to cater for unforeseen occurrences, or to lend to their neighbours who are in need now and in anticipation of reciprocity of such a gesture during their hard times too.

As early as the 1990s, Shipton (1990) criticised donors and governments who preferred and advocated the subsidisation of credit; he opines that savings should somewhat be subsidised instead of loans. However, the contention has been how savings can be subsidised in practice and could it be done through rewards of high interest rates on deposits? However, Shipton further notes that: "Farmers need not just credit, but more and better opportunities for savings, partly to reduce their dependency on borrowing. A financial policy based on only credit without savings is not only ethically dubious, but also impractical; it is like walking on one leg" (Shipton 1990: 2).

2.3.2.2 Ensuring the security of depositors' savings

Despite the above, arrangements in the informal savings markets present several risk factors that have tendencies of affecting the benefits of informal savings schemes and the poor. Wright (1999a) and Vonderlack and Schreiner (2002) say that most informal savings arrangements are self-liquidating and thus unsustainable. A study of the informal savings sector in Ghana by Aryeetey and Gockel (1991) found that 40% of savers lost their deposits to fraudulent 'SUSU'[5] collectors; nearly 80% of the respondents knew of people who had been duped. Hence, as the need for credit is important, so are savings.

It must also be recognised that a significant challenge with the microfinance industry that particularly hinders its ability to accumulate savings relates to the

[5] SUSU is a microsavings mechanism where individual collectors pick up daily deposits from savers over an agreed period of time and return the accumulated savings minus one day's deposit as fees.

issue of weak regulation and supervision, especially in developing countries where most MFIs were initially registered as not-for-profit organisations. From the perspective of monetary policy managers, financial system regulation is essential in protecting the integrity of the broad financial sector, including the protection of the mobilisation of deposits by MFIs (Wright and Mutesasira 2001).

Without adequate financial system regulation and supervision, especially in the informal financial sector, advancing the course of savings might be elusive. In a research conducted in Uganda on clients who lost their savings to either a formal, semi-formal or informal financial institution, Wright and Mutesasira (2001) suggest that 15% asserted that they lost a portion of their savings in formal financial institutions. However, 26% indicated that they lost their savings in a semi-formal financial institution, while 99% of the respondents alluded that they lost all their savings in an informal savings body.

In terms of the average amount lost, the informal sector recorded an average of 22% of depositors' amount lost as compared with 3.5% and 9.1% for the formal and semi-formal sectors respectively. Wright and Mutesasira (2001: 2) add that "people who have access to the formal sector reported saving three times as much ($386) in the last 12 months than those who saved in the semi- and informal sectors. The people saving in the formal sector also reported a lower incidence (15%) of loss and a lower rate (3.5%) of loss in the last year. Almost all (99%) people saving in the informal sector reported that they had lost some money through informal savings mechanisms and on average they had lost 22% of the amount they had saved in the last year".

The concern over the possible loss of deposits belonging to poor clients in a poorly regulated and supervised financial system is a new source of doubt about guarantees of depository protection among MFIs. To build better microfinance savings schemes to encourage savings among the poor is essential to ensure that deposits of savers are secured and protected within the regulatory framework (Armendáriz and Morduch 2010). This is because instilling depository confidence among clients of commercial MFIs is a precondition for increasing client interest in the savings products offered as a means of mobilising funds to finance their operation amid the dwindling donor funds to MFIs. However, the question is, how secure are the deposits of clients, under the new dispensation of commercial microfinance, and how are their investments of these deposits adequately supervised by regulators?

The above-espoused question provokes research interest in understanding moral hazards from a dualised perspective; thus, both from the clients and service providers of microfinance. Much of the literature (Stiglitz and Weiss 1981; Lehner 2009; Madajewicz 2011) on credits and microfinance on moral hazards are viewed from the perspective of the clients and how measures such as joint liability clauses in group-lending schemes could be used to address credit defaults. This essay argues that addressing issues of moral hazards from the client perspective is as imperative as addressing the same regarding how MFIs manage the deposits of their clients.

This is particularly important under the current commercialisation drive of MFIs, where deposit mobilisation represents a vital source of operational capital or revenue, hence the need to ensure that MFIs have the institutional capacity (i.e. the governance and management structure) to guarantee the safe management of deposits (Ledgerwood 2014).

2.4 The terms and structure of microcredit: any implications for poverty?

The primary business case for the development of the microfinance sector has been hinged on the importance of microcredits to the poor. As discussed in the previous section, microfinance originated and gained traction by providing small amounts of credit to support those who have been excluded in the formal financial sector. An important aspect that gave prominence to the microfinance trajectory was the terms and structure of loans and other products.

In this section, we review relevant literature on the fungibility of microcredit and the essence of structures, such as: disbursement processes, size of credit, loan use and repayment schedules. These themes continue to inspire many discussions in the microfinance research space because of their relative importance to the context of clients' livelihoods and poverty. In this thesis, we argue that the terms and structure of products should be consistent with clients' livelihood activities and the context of poverty.

2.4.1 Fungibility of microloans

During the early years of the development of microfinance (the 1950s to 1970s), developing countries started to conceptualise the cause of poverty from the perspective of low agricultural productivity. Consequently, targeting small loans at rural farming communities was viewed as effective to boost the level of agricultural productivity and ultimately reduce poverty. Nevertheless, these small cash loans being fungible were susceptible to diversion into other uses rather than for agricultural purposes as intended. In response, financial institutions started to offer credit in the form of farm inputs (fertilisers, seeds and tractor services) as a policy direction to ensure that loans were used for agricultural purposes (Johnson and Rogaly 1997).

However, addressing the challenges associated with the fungibility of microcredit by providing non-cash-based loans can have some implications for the poor and even undermine aspects of poverty reduction. Living in poverty is not merely having scant income sources but also the insecure income to address livelihood shocks (Karlan and Mullainathan 2007). It is believed that access to fungible microloans allows for clients of MFIs to manage shocks or emergencies that may arise and threaten the sustainability of livelihoods (Ukanwa et al. 2018a; Singh and Dutt 2019).

From the 1980s, development finance institutions started to provide cash loans to the productive poor who were involved in entrepreneurial activities. It was argued that serving the productive poor with credit would help address the problems associated with fungibility of credit. It is believed that poor entrepreneurs would instead invest fungible loans in viable business ventures to ultimately help reduce poverty in their household. This led to the rise in business loans in the microfinance sector towards the beginning of the 1990s to date.

Nevertheless, targeting the poor with business loans only is not adequate to satisfy the social objectives of poverty reduction promised by MFIs. This is because poverty has a multi-dimensional nature and requires an equally multi-faceted approach to help tackle it. The occurrence of certain non-business related activities, if not tackled immediately, can change the nature and viability of a business that can eventually undermine the poverty reduction effects of clients. The work of Hulme (1998) contends that the fungibility microloans should be viewed as an adaptation mechanism by the poor to drive maximum use from loans, for example, a farmer who uses microloans to pay for his children's school fees but later manages to pay back the loan from his wages from providing farm labour to other farmers.

2.4.2 Loan disbursement process

A critical component of the characteristics of microloans has to do with the disbursement processes. Delays in the processing and disbursement of loans can disrupt the livelihood activities of clients and consequently affect repayment schedules. In most institutions, processing and disbursing loans begins with authentication of the borrower's documents.

The loan disbursement process usually starts with verification of documentation. The process typically requires that the staff of the MFIs collect vital and personal information from the borrower and sometimes pictures of collateral security to initiate the application process. However, the lengths of time for this process vary from loan officers collecting pictures and other personal details to commence the loan application process. With group loans, usually, all members need to be verified before the loans are disbursed, especially in the case of first-time borrowers.

In most cases, however, the disbursement process can be delayed, which might cause some level of disruption to the business operations of borrowers, for example, when farmers do not receive their loans early to purchase essential farm inputs that can lead to crop failure and consequently, loss of income. MFIs need to have the right balance between conducting due diligence and the effective disbursement loans consistent with the livelihood or business cycles of borrowers. Kah et al. (2005) observed an assessment of the disbursement processes of MFIs in Gossas – a community in Senegal where women were asked to spell out how they intended to use and repay the loan. Loans were subsequently disbursed to the selected applicants after some days or months.

A similar study in the Caribbean found that the processing time leading to the disbursement of loans could span between one and a half to five weeks for first-time borrowers (Westley 2005). The study also found evidence of a relationship between shorter loan processing times and the joint liability lending strategy. Loan officers also spent more than 80% of their time reaching out to borrowers to shorten the time in processing loans – timeliness matters in the financial lives of the poor. According to Ngonyani and Mapesa (2019), the timeliness in the disbursement of loans and the number of borrowers assigned to a credit officer have a significant and statistically positive effect on portfolios at risk from MFIs.

Nevertheless, Churchill (2000) suggests that it is usual in some MFIs for loan processing to span between three and four months. Westley (2005) argues that shortening the time allocated to loan processing and disbursement could lead to borrowers maximising high value from loans, while further deepening client loyalty and timely repayment. In the particular case of an MFI in South Africa – Small Enterprises Foundation (SEF) – some clients were reported to have dropped out of an intervention owing to the high cost of commuting to process and collect loans. Some clients even bemoaned the high cost of transportation that seemingly exceeded the periodic interest payments for such small loans (Simanowitz 2000).

Considering the inflexible nature of loan disbursement, some people have criticised how MFIs operate without recourse to the contextual and livelihood issues of their clients (Johnson and Rogaly 1997). It is essential that MFIs, especially those operating in rural communities (particularly where agricultural activities are common), ensure that the periods for the processing and disbursement of loans are reflective of the livelihood needs of clients.

2.4.3 Size of microfinance loans

The size of microloans plays an essential role in poverty reduction. The nature of the clients' needs, type of business and poverty context determine the amount of capital they may require. Nevertheless, there is no consensus on an optimal loan size that enterprises, individuals and households can acquire for effective poverty reduction.

2.4.3.1 What are the determinants for microfinance loan size?

The work of Christen et al. (2003) posits that MFIs should enforce upper limits for microcredits and the size of loans should be determined according to the financial attitudes of the borrowers and cash flows. Ledgerwood (2014) observes that MFIs need to consider both the cash flow and the capacity of borrowers to repay loans owed in determining the size of loans that can be accessed. Ledgerwood's assertion places more emphasis on the debt capacity of borrowers as an essential component for determining the amount of loans that can be accessed.

However, some studies contend that the socioeconomic and geographical location of borrowers also plays a role in determining the size of loans prospective borrowers can access. Pisani and Yoskowitz (2005) and Painter and MkNelly (1999) argued that the size of loans accessible to clients has a positive effect on borrowers from urban communities. Borrowers from rural settings appear to have their loan sizes primarily determined by the seasonality of their livelihoods and the functionality of market systems. In some jurisdictions, for example, in Bangladesh, wealthy borrowers are more likely to access large loan amounts relative to low-income borrowers (Godquin 2002); similar findings were established in the case of India (Gaiha 2001). Other social factors, such as education and age of borrowers, also have positive implications on loan amounts accessible to clients in Bangladesh and Uganda (WWB 2003).

It has also been argued that the size of loans determines the outreach of MFIs operating in a location. Some financial institutions believe that providing small loans is a practical approach to reaching many poor clients. In other words, wealthier clients instead would demand bigger loans commensurate to their business needs (Schreiner 2001).

Notwithstanding, there is no evidence to suggest that poor borrowers usually request small loan amounts; instead, it depends on how much the financial institution is willing to provide loans based on their assumptions. The size of loans accessible to clients can serve as essential proxies to measure social mobility among the poor. For example, some MFIs usually start by providing small loans and subsequently scaling up the amount depending on the repayments record – termed as the dynamic incentive approach to lending

(Hulme and Mosley 1996a; Shapiro 2015; Charles and Mori 2017; Berns et al. 2018). Some studies have also argued that changes in loan amount could be a measure of clients' improvement in livelihood outcomes. It is believed that borrowers' ability to repay loans according to the schedule is a possible indicator of the profitability of the livelihoods they are involved in (Painter and MkNelly 1999). However, Painter and MkNelly's claim cannot be flawless since some borrowers usually use various avenues (including taking on more debts, selling household assets) to repay their loan commitments (Arambepola and Romeshun 2019).

In all these, regarding what constitutes the optimum loan amounts accessible to borrowers is inconclusive in the literature. Different MFIs prioritise various reasons for setting the size of the loan depending on their objectives. Some poor borrowers may require significant loans to support the scale of their livelihood activities but may be unsuccessful due to their limited cash flow. The size of a loan provided to a poor borrower should depend on their livelihood activities and other contextual issues of the clients. This will allow for clients to make adequate investments in their livelihoods to reduce poverty.

2.4.4 Microfinance loan use

Lending institutions in most communities are critical of borrowers' purposes of acquiring loans. Loan uses can have severe risks implications that could undermine the borrowers' ability to repay loans. In some countries, lending institutions are more likely to provide loans for projects or borrowers profiled as low-risk – short-term in nature and that have the potential to be self-liquidating (Yeboah 2010).

It is important to add that most lending institutions, including MFIs, are mostly unwilling to finance individuals or projects considered as high-risk and with a relatively long payback period. Even when credit is provided for purposes that are considered risky and long term, collateral security and other forms of guarantees are needed to reassure creditors.

Most microfinance loans are provided to support productive investments activities initiated by the poor who are unable to secure funding for the formal financial sector. In the formative years of microfinance, small loans were given to rural women in Bangladesh who were considered economically active but systematically excluded from the formal financial system. There is evidence to support that most microfinance loans support rural agricultural activities, petty trading among SMEs and smoothen consumption (Blakstad and Allen 2018; Hossain et al. 2019; Mia et al. 2019).

It is essential to mention that the uses of microfinance loans should not be linked only to direct livelihood investments such as trading and farming but also to social investment such as health and education. Some evidence suggests that microfinance loans have gone a long way to supporting households to pay for children's school fees (Saha and Sangwan 2019); improving household health and wellbeing (Mtamakaya et al. 2018); and in some cases, helping to manage livelihood shocks (Ukanwa et al. 2018b). It has also been established that microfinance loans help the poor to smooth consumption in many developing countries (Hulme and Mosley 1996b), since cash loans are fungible and therefore could be diverted to unintended purposes that are considered essential for household survival (Banerjee et al. 2015; Jumpah et al. 2018).

The financial lives of the poor are complicated and usually occasioned with little and irregular cash flow patterns that lead them into an economic cycle of borrowing, repayments and drawing on savings (Daryl et al. 2010). This review, therefore, reaffirms the argument that ensuring flexibility of loans (since it is fungible) can expose both borrowers and financial institutions to vistas of opportunities.

2.4.5 Loan repayment: flexible vs rigid

All lending institutions are concerned about the ability of borrowers to repay loans owed at maturity. The sustainability of MFIs to an extent depends on the practical measures implemented to enforce repayments. The literature shows that MFIs include various strategies in their loan contracts to ensure regular and timely repayments of loans. Some of these include a social and physical collateral requirement (Kamaluddin et al. 2019); personal guarantees (Ssekiziyivu et al. 2018); and include joint liability lending schemes (Creedy and Hoang 2018) to facilitate loan repayments. Some of these mechanisms enforced in microfinance contracts could also unleash dire implications of the borrowers’ ability to invest funds in optimal projects for fear of default.

In most cases, microfinance loans are repaid from the proceeds of the investment made through loans. For example, a cereal will usually repay the funds borrowed to purchase farm inputs after harvest. In this context, it is only proper for the repayment structure to be linked to the livelihood cycle of the borrower.

Admittedly, just as timeliness in the disbursement of loans is essential to borrowers’ livelihoods, so is repayment. Loan disbursement and repayment schedules should be adequately matched to the needs of microfinance clients to ensure that clients do not slip back into poverty due to the rigidity in the structure of loans. The work of Rutherford (2000) postulates that borrowers are sometimes compelled to use their savings to repay loans to avoid default – this undermines the ability of clients to build up savings (Collins et al. 2010).

The nature of the microfinance loan repayment structure in most jurisdictions is taken on a daily, weekly, monthly and fortnightly basis. It is argued that depending on the nature of the borrowers’ livelihood activities, some repayment schedules can be viewed as strict/rigid. Some MFIs claim that tight repayment schedules are meant to encourage financial discipline among borrowers (MkNelly and Kevane, 2002). It is believed that strict repayment schedules help to ensure high repayment rates and support clients’ access to repeated loans.

In a randomised control trial (RCT) study in urban India, Field and Pande (2008) established that increasing the loan repayment schedule from weekly to monthly would substantially reduce the cost of transactions incurred by MFIs. However, this calls into question, what the ideal microfinance repayment structure is that works effectively for clients and supports the operational sustainability of MFIs. Do flexible or rigid repayment schedules have any implications for poverty?

Czura et al. (2019) contend that flexible repayment schedules of loans offered by MFIs are helpful for the borrowers’ ability to work themselves out of poverty. According to Gulesci and Madestam (2018), flexibility in microfinance credit repayment schedules helps to ease the credit constraint on borrowers and encourages higher spending at the start-up phase of a business, and further serves as a form of insurance in the event of income uncertainties.

In contrast to rigid repayment schedules, flexible repayment has been revealed to help increase the income of the poor by fostering clients' investment in viable and riskier projects. The concern, however, is that most MFIs barely provide flexible repayment schedules in the design of loan contracts in practice.

The primary debate surrounds support of rigid repayment schedules to ensure that borrowers are financially disciplined and commit their investment in viable projects (Armendáriz and Morduch 2010; Labie et al. 2017). The work of Czura et al. (2019) suggests that loan repayment is not merely determined by the borrowers' ex-ante project choices (ex-ante moral hazard), but also borrowers' ex-post decisions aimed at loan repayment (ex-post moral hazard). Some empirical studies suggest that ex-post moral hazard plays a significant role in loan repayment contracts deemed to be rigid (Karlan and Zinman 2009).

Nevertheless, Fischer and Ghatak (2016) add that flexibility in loan repayment contracts has two channels of affecting ex-post moral hazard. First, they theoretically argue that little and regular repayments are incentive-compatible for present-biased debtors as compared to allowing them to delay repayments to the future where bunch instalments will be required. Some evidence points to the fact that flexibility in loan repayment has the potential to encourage moral hazards in the absence of social pressure, joint liability and collateral security (Czura et al. 2019).

Arguably, the high repayment rates of microfinance loans are usually associated with borrowers having social capital and the presence of peer pressure in joint liability lending structures (Giné and Karlan 2014; De Quidt et al. 2016). However, flexibility in the repayment structure of loans offers borrowers discretion in the timing of repayments, which can be matched with cash flows from livelihood activities. It is therefore critical for MFIs designing loan contracts to consider the possible benefits of the flexibility of repayments to the poor since that allows them to self-insure against shocks.

2.5 Poverty: causes and policy responses

Meaning of poverty: what does it mean to be poor?

Poverty is multi-faceted. Following the understanding of poverty from the income perspective, a myriad of factors account for the poverty of individuals, which may include, poor productivity of labour, dwindling agricultural productivity, the lack of or inadequate capital investment, lack of sufficient demand for goods and services, together with a host of factors that inhibit individuals' and households' ability to earn income. Hence, spurring economic growth is believed to be the sure way of addressing the causes of income poverty (World Bank 1978: pg. iii).

Most studies into microfinance and poverty reduction have been biased towards a pedestal conceptual understanding that households and individuals are poor because of the apparent lack of financial resources; due to the disinterestedness of the formal financial sector to provide services to the poor (Hulme and Mosley 1996a). This conceptualisation of poverty and its eradication mechanisms characterised the evolution of the rural agricultural microcredit that subsequently changed through several stages to its current state.

The year 2000 was termed as the year of poverty reduction, which was evident in the World Bank WDR and themed: 'Attacking poverty'. In pursuit of this vision to eradicate global poverty, the World Bank argued that: "poverty is the result of economic, political, and social processes that interact with each other and frequently reinforce each other in ways that exacerbate the deprivation in which poor people live. Meagre assets, inaccessible markets, and scarce job opportunities lock people in material poverty. That is why promoting opportunity – by stimulating economic growth, making markets work better for poor people, and building up their assets – is key to reducing poverty" (WorldBank 2000: p. 1).

Bui (2014) postulates that a cause of poverty in most countries in the global south is the credit constraints imposed on the poor, resulting from a failure in market systems. Accordingly, "the poor often find themselves in a vicious circle: producing at a subsistence level makes it difficult to accumulate savings or other assets, thus making it difficult either to invest in productive resources or gain access to credit in formal capital markets, resulting in low productivity and continued poverty" (Coleman 1999: p.105).

Okibo and Makanga (2014) assert that the causes of poverty are both internal and external factors, where internal relates to socioeconomic and environmental factors and external causes emanating from the imbalances in international trade. What this implies is that poverty reduction interventions should be multi-dimensional in nature and seek to address the root causes of poverty rather than solving the symptoms of poverty (such as low and irregular income, and malnutrition).

Over the years, most studies on microfinance have barely (in some instances) considered how the causes of poverty (poverty context) influence the socioeconomic outcomes of clients. Indeed, there have been limited discourses relating to how microfinance interventions should be designed and implemented. This thesis argues that a more nuanced nexus needs to be established between the design of poverty reduction interventions and the causes of an individual or household poverty situation. As discussed earlier in this review, access to microfinance services (especially credit) alone is not adequate to get people out of poverty; as such, microfinance should be complemented with other poverty reduction interventions such as CCTs linked with education, nutritional support to the ultra-poor and welfare support on health insurance.

The arguments put forward by Bateman fall in line with the above arguments on CCTs as he argues that: "In return for generally making some small social commitment – for example, one might have to ensure one's children visit the local health clinic or regularly attend school – CCT models provide instant cash support to the most 'at-risk' individuals and families. Rather than immediately loading up such individuals and families with expensive and often unpayable microcredit, then, the CCT model provides a way of instantly resolving extreme poverty without building in long-term indebtedness" (Bateman 2010b: 167-168).

The extension of this argument of CCTs augmented with microfinance services raises concerns on public policy regarding poverty reduction. There is a need for collaboration and harmonisation of government strategy or programmes on poverty reduction and the interventions being fashioned out by MFIs (either welfarists or for-profit MFIs), for example, the gains made by Bolsa Familia and Opportunidades projects in Brazil and Mexico, respectively through targeted social programmes, that resulted in a 10% reduction in poverty in Mexico (Skoufias 2001).

It is imperative for the institutional designs of MFIs to take into account the multiplicity of factors that influence an individual poverty situation; to avoid product designs that seek to address poverty from a unidimensional perspective. The argument advanced by Chambers (1988) is consistent with this as he says that practitioners and institutions committed to poverty reduction should assess poverty from a continuum of different dimensions that are considered relevant from the perspective of the poor themselves. It is also vital for poverty assessments to look beyond income/consumption measurement to cover some assets of the poor (land, human capital, social capital).

2.5.1 Poverty and vulnerability nexus: how are households susceptible to poverty?

Poverty and vulnerability are often used interchangeably, yet the two have different meanings. The concept of vulnerability pertains to the possibility that individuals and households will remain or slip back into poverty in the future due to shocks emanating from the economic system or as a result of depleting sources of livelihood (Barrientos 2013). Being vulnerable does not mean an individual is poor. However, poor people are more susceptible to poverty. Some vulnerability such as ill-health, death, economic stresses and floods have the tendency to plunge individuals and their households into poverty (DESA 2009).

It is worth noting that vulnerability should not be considered as a dimension of poverty but rather a source or cause of poverty. In effect, tackling poverty should usually start with an understanding of the vulnerability context of the poor. Building households' resilience can help to manage and reduce their level of susceptibility to poverty. In the context of poverty reduction, it is vital to understand the individual or household level of sensitivity and resilience to risk (Moser 1998). Also, Dallimore (2013) suggests that vulnerability is more associated with the changing or dynamic nature of poverty. While poverty could be viewed as a state of one's socioeconomic wellbeing, vulnerability indeed "focuses on assessing the extent of the threat of poverty or low wellbeing, measured ex-ante, before the veil of uncertainty has been lifted" (Dercon 2005: 486).

It is also essential to define vulnerability with some relative benchmarks that help us measure the context of one's susceptibility to poverty – since poverty and vulnerability are firmly intertwined (Azeem et al. 2019). In this direction, one can, therefore, suggest that vulnerability is "determined by the options available to households and individuals to make a living, the risks they face and their ability to handle these risks" (Dercon 2001: 27). Similarly, poverty is the 'ex-post' consequence of the process through which households or individuals make informed choices about livelihood assets and incomes in the context of risk; whereas one's vulnerability to poverty is an 'ex-ante' to this process of making livelihood choices. Vulnerability to poverty measures one's exposure – it attempts to measure one's exposure to poverty, and not the poverty outcome itself (Azeem et al. 2018; Gallardo 2018).

Agreeably, like poverty, the vulnerability context of households is multi-dimensional. This suggests that the various conceptions of vulnerability should not be limited in scope to monetary indices but also other dimensions such as education, the standard of living, health and among other factors that have some level of sensitivity to poverty. In attempting to design poverty reduction strategies or tools, all the dimensions of an individual's or household's vulnerability should be taken into context. In this context, vulnerability to poverty encapsulates the options available to individuals and their households to eke a living amid uncertainties (risks), and the ability to mitigate such risk (Dercon 2001).

Consequently, tackling the various strands of vulnerabilities that individuals face would result in tackling poverty, and the reverse is true – reducing poverty helps to reduce vulnerability. It is believed that sustained economic growth that is good for the poor has the potential to reduce households' exposure to vulnerabilities and ultimately affect poverty. Beegle et al. (2018) and Gilligan (2019) also argue that social safety nets that cover CCTs, health insurance, education and other social benefits (unemployment) would help reduce the risk of people remaining in or slipping back into poverty.

Additionally, the work of Dercon (2001) summarises the following as policy initiatives capable of addressing a household's/individual's susceptibility to poverty:

- Sustained stability in the macroeconomic environment with low inflationary pressures (in order not to undermine the savings of the poor).
- Functional markets systems for the poor that facilitate the productive exchanges of assets and products.
- Microcredit – with product features that supports households/individuals to accumulate livelihood assets.
- Micro-savings and micro-insurance that enable households to build up savings and support in pooling risk.
- Provide access to improved health care and insurance for the poor – this reduces the threats of ill health that could increase households' vulnerability context.

2.5.2 Why should microfinance focus on vulnerability?

Well-designed financial services that reflect the vulnerability context of households can have a direct and prominent role to play in reducing poverty. Household vulnerabilities are associated with risks. As such, designing microfinance products such as micro-insurance tools that have the potency to pool risk across a spectrum of people, communities and income-generating activities can help reduce the adverse outcomes of vulnerability (Janzen and Carter 2018). Similarly, adequately designed savings products that meet the needs of households can play a complementary role to micro-insurance. Savings products not only help households accumulate lump sums for investments but can also adequately position individuals to mitigate severe consequences such as livelihood and economic shocks (Steinert et al. 2018).

Additionally, access to adequate credit products (Quach 2005; Das 2019) can also effectively influence a household's poverty outcomes through investments that help in building assets. It is believed that access to flexible credit products enables households to address their vulnerabilities without necessarily depleting household savings. Microfinance can also help reduce the chances of vulnerable households in using a negative coping mechanism to livelihood vulnerabilities and risks.

Undoubtedly, deepening of the financial sector can contribute to economic growth and eventually reduce poverty. As mentioned above, micro-savings and insurance products can be effective at safeguarding the livelihood assets of the poor. It is believed that microfinance could play a much more profound and dynamic role in reducing vulnerability and poverty of households while ensuring the sustainability of MFIs. This thesis argues that MFIs working for poverty reduction need to design products and services that reflect the poverty and vulnerability context of their clients.

Swain and Floro (2012) conclude in a study conducted in India that being a member of a microfinance self-help group (SHG) significantly reduces their vulnerabilities to poverty relative to non-members. Similar studies also established that microfinance helps to reduce vulnerability among female-headed households in Ghana (Osei-Hwedie and Kurantin 2019), and helps improve farmers' risk-coping abilities in China (Han et al. 2019).

2.5.3 Managing household emergencies: How useful are emergency loans?

The financial lives of the poor are both complicated and full of uncertainties – they live with risk as a daily issue. They have to cope with various risks associated with their livelihoods, health and market uncertainties (Daryl et al. 2010), however, because the poor are loosely integrated into the financial system, they are unable to access specialised instruments that are efficient enough to help them manage emergencies when they occur. The poor are left with limited options in the absence of formal and informal risk management channels than to resort to selling assets, drawing down on cash savings and sometimes borrowing from expensive sources (Daryl et al. 2010; Gash and Gray 2016).

To ensure the security of poor people's livelihoods amid limited options and growing uncertainties, financial services providers – particularly MFIs – need to offer tools that help in addressing emergencies. The mechanisms used by the poor to cope with emergencies are either negative or positive, depending on availability, convenience and fungibility of the mechanism (Gash and Gray 2016). For example, selling household food grains to pay for a child's medical expenses could be viewed as a negative coping mechanism since it further exposes the household food insecurity.

Similarly, drawing down on savings, though positive, could also undermine the household ability to build up large amounts of savings for future investments. Gash and Gray (2016) found in Burkina Faso that women typically used the income from cash crops, household livestock fattening and commerce to cover their emergency expenses. However, during challenging economic times, such as hunger during the lean season, many women depended on the sale of livestock and fattening. This shows how, in the absence of better financial tools, the households face the high likelihood of slipping into a virtual cycle of poverty.

Managing livelihood emergencies is also a financial problem that should be given similar importance, such as savings and loans. It is believed that emergency microfinance loans tend to minimise clients' susceptibility to shocks while increasing livelihood assets and income (Churchill 2003). The importance of emergency loans can be viewed from the fact that they serve as safety nets to cushion low-income households to help mitigate economic vulnerabilities. The poor are always worse affected when disasters occur. As such, emergency loans can play a critical role in the event of natural disasters, especially when the livelihoods of communities are decimated as a result.

Dhakal et al. (2019) report that microcredit played a critical role in the recovery and adaptation process for people following the 2015 earthquake in Nepal. Accordingly, about 61% of the adult population indicated that they accessed emergency loans from financial institutions to help them invest in income-generating activities to patch their livelihoods together. It is worth mentioning that emergency loans do not help to minimise vulnerability but do support clients to derive some benefits from the market.

2.5.3.1 Why should MFIs offer emergency loans?

Some types of risks or emergencies are unavoidable. Since risks are inevitable in people's lives and particularly those worse off when living in poverty, financial institutions need to provide support. The work of Churchill (2003) identifies three categories of risks that warrant both formal and informal financial institutions to show interest in shielding the poor using tools with the view to averting a vicious cycle of poverty. These categories of risks include:

1. Economic pressure or stresses – these are usually expected short-term surges in household expenditure that are unsupported by the current regular cash flows, for example, childbirth, education expenses and rental expenses.
2. Idiosyncratic risk – these are mostly unexpected or unanticipated occurrences that negatively disrupt household income and expenditure patterns; increasing household expenses while mounting downward pressure on income. This form of risk may include the death of a household member or livestock, illness, loss of livelihood or failure in business.
3. Covariant risk –unexpected events (such as floods, fire, droughts and other irresistible forces of nature) can always occur that might lead to people experiencing substantial losses to their household income-generating activities.

In most developing countries, rural dwellers are occasionally confronted with these various forms of risks that threaten to undermine their livelihoods (Churchill 2003). In some instances, some of these risks are interconnected, therefore mounting pressure on households' economic conditions. For example, a community experiencing protracted drought may also be saddled with a loss of livestock and crops. The occurrence of certain risks may make a household vulnerable to other forms of risks. A household or individual experiencing some covariate risks may make the household susceptible to idiosyncratic risk and economic shocks. When households go through bad economic periods or experience idiosyncratic risk, it undermines their ability to manage covariate risks when they do occur.

Given the potential role of financial tools to help households manage their vulnerabilities, MFIs need to recognise the benefits that could be derived from emergency loans (Wissel 2019). One benefit of emergency loans to MFIs is that they help to reduce the rates of loan default when unexpected events occur. Emergency loans support clients and their households recover from shocks that might have affected their livelihoods and enable them to meet their repayment commitments. This is because the consequences of unexpected emergencies in the household may often compel them to liquidate their productive assets and might even stop them from engaging in income-generating activities (Brain 2017).

It is believed that access to emergency loans helps protect poor households from the risks that make them susceptible to more livelihood vulnerabilities. It must be emphasised that emergency credit helps build and maintain a loyal credit relationship between borrowers and MFIs, and further protects households from falling back into a vicious cycle of poverty. Gash and Gray (2016) assert that it is critical for financial institutions working to empower the poor to consider designing financial tools with characteristics that matter in helping households cope with shocks; to design financial products with features that matter most for coping with shocks: timeliness of payout and availability of the product.

2.6 Research gap

The study explored a substantial scope of the extant literature on microfinance and poverty reduction. It particularly emphasised the overview of microfinance and its evolution, and reviewed some of the topical issues that occupy dominant discourse in microfinance with the view to highlighting the current state of knowledge in providing financial services to the poor. The review aimed to help identify grey areas in the literature on microfinance and poverty reduction that have not been adequately explored or examined.

The review established that most research on microfinance has always been biased towards the effects of microcredit in poverty reduction, with little emphasis on exploring the equally vital role of savings towards the same end of poverty eradication. Even when some studies (Armendáriz de Aghion and Morduch 2000; Addae-Koranky 2012; Bui 2014; De Quidt et al. 2014) attempt to analyse the effects of both credit and savings designs of MFIs they often fail to explore the contextual issues on the demand side of microfinance that affect poor clients. There is, therefore, the need for studies that explore both the demand and supply sides of microfinance; to establish the factors that impede the ability of microfinance to work for the poor effectively. An understanding of both sides of the microfinance market is necessary for designing products with both the supplier and customer in mind.

Following the critical review of the literature, an essential aspect of microfinance that has not been adequately explored relates to how microfinance implementation and products are designed to be effective for poverty reduction. Consequently, this study sought to examine how microfinance products are designed and implemented, and the implications for poverty reduction. The study argues that product and implementation designs that reflect the livelihood needs and poverty context of poor clients have the potential to reduce poverty. The researcher believes that some MFIs have often designed their products in one way, while the actual implementation of these products targets a different set of clients – not conceived initially. Consequently, this has resulted in a design and implementation gap which needs to be bridged for effective poverty reduction.

2.7 Chapter summary

The review established that changing in development thinking or paradigms over the years has influenced the conceptualisation of microfinance and its implementation. It delved into some of the dominant discourse in microfinance and mainly shed light on the conventional channels of implementation of microfinance interventions. The chapter highlighted the importance of group-lending programmes in extending financial services to the poor, while tackling issues of moral hazards and cost of operations. It was also revealed that individual lending allows borrowers to take on credit according to terms that are suitable to the nature of the clients' business. Lastly, we explored the meaning of poverty and its nexus with vulnerability. It emerged that clients' or households’ vulnerability relate to their susceptibility to poverty, hence, well-designed financial services that reflect the vulnerability context of households can have a direct and prominent role to play in reducing poverty.

CHAPTER 3

THE GHANAIAN CONTEXT: ECONOMY, COMMUNITY AND INSTITUTIONS

3.0 Introduction

This section of the thesis presents a country context, a summary of essential background information to the study area, and a review of the nature of financial intermediation and microfinance interventions in the Jirapa municipality. Additionally, this chapter gives a brief reflection on the social and macroeconomic environment of Ghana with the view to establishing contextual linkages with the subject being investigated in the study. The chapter is structured into the following sections: poverty and economic context – shedding light on the socioeconomic indicators of Ghana and their detailed justification for the study. It also touches on some poverty reduction policies implemented in Ghana, and reviews the state of knowledge on the financial sector. The profile of the various financial institutions involved in the study was also reviewed, together with a description of the study area.

3.1 Ghana: poverty and economic context

The country, Ghana, was until the 6th March 1957, a British colony under direct rule. Ghana is in West Africa, with an estimated landmass of approximately 240,000km^2 and located on the Gulf of Guinea – a tributary of the Atlantic Ocean (IFAD, 2007).

The work of McKay and Sowa (2008) holds that, since Ghana gained independence from the British, there has been a series of political and economic upheavals. In the political landscape, Ghana has had four military coups since independence. The most frequently cited reason for military takeovers is pervasiveness of corruption among the ruling elite. Nevertheless, since 1992, Ghana has made a significant return to multi-party democracy, witnessing the peaceful transfer of power from one democratic government to the other.

According to GSS (2013a), Ghana has an estimated population of about 25 million. Following the 2010 Population and Housing Census (PHC) the population has since increased to approximately 29 million as per WDI (2019) calculations; with an annual population growth rate of 2.2% (WDI 2019). The country's economic performance measured in terms of gross domestic product (GDP) stood at about $47 billion in 2017, while GDP per capita (PPP) for the same period was estimated at $4,641 (WDI 2019). As of 2017, the number of Ghanaians living in rural areas stood at about 13 million (44.8%) with approximately 16 million (55.2%) in urban areas (WDI 2019).

Fundamentally, Aryeetey and Kanbur (2008) suggest that economic growth in Ghana has mostly been driven by low employment generating sectors of mining, oil extraction and finance. The manufacturing sector that records high labour absorption rates has also been characterised with relatively slower growth rates. McKay and Sowa (2008) maintain that Ghana's macroeconomic instability culminating in high interest rates and high taxes tied with chronic energy problems makes manufacturing less competitive and more fragile within a liberalised trade environment.

Perceptions matter – especially in relation to the business environment. The ease of doing business plays a critical role in attracting external investment to support economic growth and poverty reduction. It is an area which fortunately is mostly within the control of the government to review the processes, rules and regulations that impact on the business environment. Addressing all the constraints that impede the daily operations of small businesses can pave the way for the more active involvement of the poor in rural communities.

According to the WorldBank (2019) 'Doing business' report, Ghana is ranked at 114 out of 190 countries on the ease of doing business score. On other indicators, Ghana ranks as follows: ease in getting credit (73), enforcing contracts (116), starting a business (108) and getting electricity (86). The table below shows how Ghana performs across some selected indicators in the 2019 'Doing business' report relative to other comparative African countries.

Table 3.1 Starting a business, access to credit and enforcing contracts in Ghana and other comparator economies – global ranking

Comparator country	Ease of doing business	Starting a business	Access to credit	Enforcing contracts	Access to electricity
Ghana	114	108	73	116	86
Nigeria	146	120	12	92	171
Cote d'Ivoire	122	26	44	106	143
Togo	137	74	144	137	105
Burkina Faso	151	79	144	165	181
Kenya	61	126	8	88	75
Rwanda	29	51	3	78	68
Tanzania	144	163	60	64	83
Ethiopia	159	167	175	60	131
South Africa	82	134	73	115	109
Mozambique	135	174	161	167	100
Zambia	87	102	161	130	128

Source: World Bank, Doing Business Report (2019)

According to the World Bank's Worldwide Governance Indicators (Kaufmann and Kraay (2017), in 2017, Ghana scored an estimated[6] -0.11 in government effectiveness, an improvement from the previous year's score of -0.20. In terms of political stability, Ghana scored an estimate of 0.09 in 2017, representing an improvement from the 2016 estimate of -0.13. A conducive business environment is a precondition for economic and improved human development. Asongu and Odhiambo (2019) suggest that the procedures and time required to start a business, level of tax compliance, and the ease in accessing credit can have significant implications for economic growth and poverty reduction.

3.1.1 The fight against poverty in Ghana: progress and obstacles

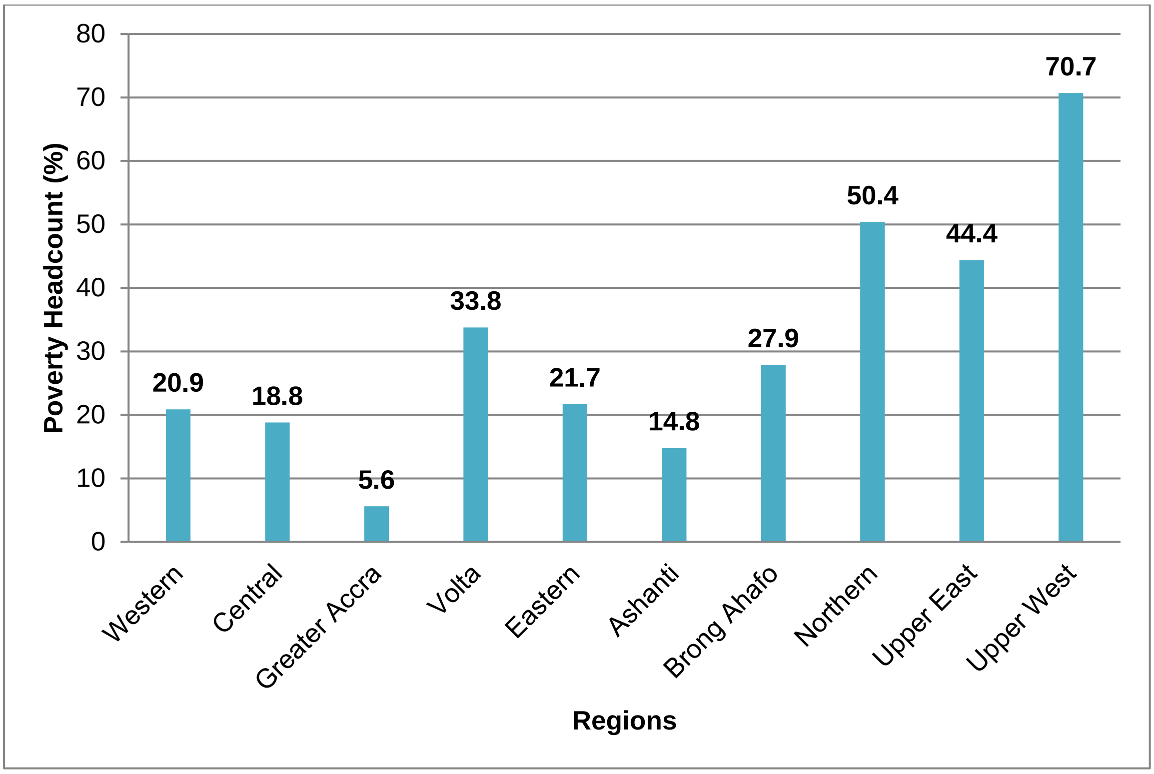
The challenge of global poverty has received massive attention in the policy arena. The fight against poverty in all its forms has always gained some attention in the economic and social policy realms of both the developed and developing countries (Appiah-Kubi et al. 2008).

[6] Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).

Poverty in Ghana has witnessed dramatic declines since the late 1980s. For instance, the population of Ghanaians defined as poor (as per the national poverty line) declined from almost 52% in 1991/1992 to a little under 40% in 1998/1999 (Ashong and Smith 2001). According to the Ghana Living Standards Survey, by 2005, this had reduced further to 28% (Ghana Statistical Service, 2006). Nevertheless, this positive trend tends to hide the geographical and occupational (see figure 3.1 for poverty headcounts by region in Ghana) heterogeneity in levels of poverty. For instance, the rural savannah areas in the northern part of the country experienced an increase in poverty while overall food crop farmers experienced the least decline in poverty (Gallardo 2002a). Reductions in poverty were concentrated in the Accra area and the rural forest regions of the country.

Poverty in Ghana, like in most other sub-Saharan African countries, is a predominantly rural phenomenon. However, out of 35% of Ghanaians classified as poor, 75% lived in rural areas of the country. It is noted that Ghana's rural poverty is estimated to contribute approximately 90% to national poverty (Oduro 2001). Statistics also reveal that over one-half of the people living in the rural part of the savannah ecological regions of Ghana continue to be extremely poor, hence, the need for development actors to prioritise poverty reduction interventions in rural communities. The figure below shows the regional distribution of headcount poverty across Ghana. Accordingly, the Upper West Region (where the study is being conducted) has the highest number of people living in poverty relative to the rest of the country.

Figure 3.1 Poverty headcount by region



Source: Ghana Statistical Service, 2010 PHC and GLSS6

In figure 3.1 above, the Upper West, Upper East and Northern Regions, all in the northern part of Ghana, have the highest headcount poverty (70.7%, 50.4% and 44.4% respectively) as compared to the rest of the country. It is not surprising that the choice of this study is situated in the northern part, and precisely in the Upper West – the region with the highest rates of poverty.

However, because of the massive rate at which poverty reduction has slowed down, and with an accompanying increase in the depth of poverty in some regions of the country, there is a need for Ghana to recalibrate its national poverty reduction strategies to reflect both the depth and incidence of poverty. Particular attention should be given to the performance of the regions in the north of Ghana, as they appear to be the regions that fall behind in terms of poverty performance.

Cooke et al. (2016) note that the Upper East Region's recent strides in terms of poverty reduction levels require further critical analysis to identify the factors responsible for the improvement. However, the authors also observe that the high levels of poverty depth in the Upper West Region are indicative that strategies and programmes for poverty reduction urgently need more intensity and coverage in that region.

3.1.2 Poverty reduction policies in Ghana

Poverty reduction continues to be a significant challenge confronting Ghana's development in recent times. One of the typical limitations facing the poor is their inability to access finance from the formal sector to enable them to take up economically viable opportunities in order to move out of the shackles of poverty. In this regard, a significant level of government initiatives and policies for poverty reduction have always aimed at the economic empowerment of the poor. Nathan et al. (2004) observe that the concern of facilitating the involvement of poor people in the formal financial sector has been the motive for many financial sector policy changes. As such, in the quest to reduce poverty in Ghana, successive governments have pursued and implemented policies aimed at liberalising the financial sector to kick-start the process of economic growth.

Since Ghana gained independence from British colonial rule, the subsequent governments have sought to implement several development policies and programmes aimed at spurring economic growth and improvement in the living standards of the people. These policy interventions have produced varying scales of success in the development landscape with some apparent obstacles. Some of these policies include Ghana Vision 2020, Ghana Poverty Reduction Strategy (2003–2005); and the Growth and Poverty Reduction Strategy (2006–2009), among other policies discussed below. It should be stressed that these strategic policy interventions yielded substantial progress towards building a sound macroeconomic environment to support the poverty reduction objectives of the country.

3.1.2.1 Ghana Vision 2020

In 1995 Ghana's parliament was presented with the country's Coordinated Programme of Economic Social Development Policies – christened Ghana: Vision 2020. The WorldBank (2003) notes that Ghana's Vision 2020 was initially called the National Development Policy Framework, and was designed to span

25 years. The primary development objective of the policy was facilitating the swift implementation of economic strategies to improve the social and economic wellbeing of Ghanaians. The crafting of the Vision 2020 policy framework was heralded by the National Development Goal Setting Exercise. This exercise sought to engage all metropolitan, municipal and district assemblies in Ghana, to incorporate their local perspectives and development needs. It is essential to note that this exercise established the fundamental national goal that seeks to reduce poverty and improve the quality of living standards, while sustaining national wealth for future generations. Indeed, the policy was also aimed at facilitating a more equitable strategy for wealth (re)distribution considering the role of both the government and private sectors in poverty reduction, gender mainstreaming, employment creation and rural development (IMF 2012).

3.1.2.2 Ghana Poverty Reduction Strategy Papers (GPRS) I & II

Following Ghana's Vision 2020 agenda, the GPRS I (ONE) shifted into gear, an IMF-World Bank-supported development assistance programme under the HIPC debt relief initiative in 2002. The primary focus of GPRS I was to restore macroeconomic stability and significantly reduce poverty. The main thematic areas of the policy were: Production and Gainful Employment, Human Resource Development and Basic Services, Special Programmes for the Poor and Vulnerable, and Governance. Nevertheless, in all these thematic areas of focus, the government together with development partners rested on the following five keys areas of national priority: infrastructure development, rural development with the focus on modernised agriculture, enhanced social services, improved good governance and the development of a resilient private sector.

On the other hand, the GPRS II component also emphasised growth as the sine qua non for sustained poverty reduction – as featured in the GPRS I. The medium- to long-term goal was for Ghana to achieve middle-income status within a measurable planning period. Similarly, the main themes of the GPRS II included: sustained macroeconomic stability, scaling up the competitiveness of the private sector, development of human capital, as well as supporting good governance and ensuring civic responsibility.

It is worthy of mention that both GPRS I and II significantly contributed to the efficient allocation of national resources. Both policies also further deepened the existing platforms for dialogue and consultations between development partners and the Government of Ghana, which allowed for the mainstreaming of the Millennium Development Goals (MDGs) and other development commitments consistent with poverty reduction into Ghana's development agenda. An essential component of the GPRS was the inclusion of a comprehensive monitoring and evaluation framework for tracking expenditure, outputs and activities consistent with the broad goals of ensuring growth and poverty reduction.

3.1.2.3 Highly Indebted Poor Countries (HIPC)

Debt servicing has been a major contributing factor inhibiting economic growth in virtually all developing countries, and the impact of debt servicing has been more severe on African countries in particular. Ghana spent around US$409.7 million on debt servicing in 1994. This represents 29.6% of the exports of goods and non-factor services. In 1995, the country spent US$635 million on debt service; this amount equalled about 40.2% of total export earnings.

After the adoption of the HIPC initiative, the level of debt servicing has exhibited a declining trend. The amount of debt service payments dropped sharply from US$544.8 million in 2000 to US$306.6 million in 2001, indicating a significant reduction of debt servicing of about 43.7%. In 2002, Ghana received debt relief amounting to US$275.2 million, out of which US$109 million was credited to the HIPC account at BOG.

3.1.2.4 Livelihood Empowerment Against Poverty (LEAP)

In 2008, the Government of Ghana established Livelihood Empowerment Against Poverty (LEAP) as a social protection policy with the objective of providing direct cash transfers to destitute and vulnerable elderly persons. The programme, through the Community LEAP Implementation Committee (CLIC), gives special attention to households with orphans, vulnerable children and people with extreme disabilities. The programme at the period of its establishment made payment of $4–8 every two months to approximately 70,000 households across Ghana, particularly in rural communities. The cash amounts transferred to beneficiaries depended on the size of the household.

Currently, households with one beneficiary receive $12, two beneficiaries in a household receive $14, three beneficiaries in a household get $16.30 and households with more than four beneficiaries receive $20 per month. The LEAP policy currently has at least one household member, and about 90% of its beneficiary households enrolled onto the national health insurance scheme. Indeed, the programme has also witnessed a 34% rise in coverage of children under six years and a 16% increase for children under the age of 17 years. The policy is still widely implemented in many rural communities in Ghana, with a good number of beneficiaries registered in most localities where this study was carried out.

3.1.2.5 Microfinance and Small Loans Centre (MASLOC)

In 2001, Ghana qualified for the HIPC programme initiated by the World Bank to provide debt relief to debt-burdened countries in the 'third world'. It was intended that funds from the HIPC initiative would be used by governments of beneficiary countries towards reducing poverty and provision of basic social amenities. The Government of Ghana (GOG), in line with the interest of donors, decided to make financial services available to the poor as a means of empowering them economically; thus, establishing the Microfinance and Small Loans Centre (MASLOC)[7] in 2006 to coordinate the government's MF schemes geared towards poverty reduction.

Furtherance to MASLOC's birth, President John Agyekum Kufuor (then President of Ghana) launched a $50 million MASLOC fund as a sign of government commitment to poverty reduction in the country. Technically, MASLOC is the GOG apex body mandated to implement the government's MF strategy to nip poverty in the bud, create jobs and wealth. Consistent with the goals enumerated in the Ghana Growth and Poverty Reduction Strategy II Papers (GPRS), the fund was earmarked to provide microcredit and small

[7] The activities of MASLOC are managed from a special unit in the Office of the President of Ghana.

loans to the poor, and small and medium enterprise (SME) owners to help smooth their consumption, bolster their local economies and subsequently stimulate growth.

MASLOC has the mandate of ensuring comprehensive, judicious and fiduciary management of GOG and the development partners' funds aimed at microcredit programmes. In pursuance of this mandate, the centre is also responsible for educating and promoting the activities of non-bank financial institutions targeting poor communities. Besides administering and regulating microcredits, the centre is also mandated to coordinate and collaborate with other institutions active in the microfinance sub-sector. It is envisaged that through proper administration of funds, MASLOC will avail financial services that are sustainable to individuals, body cooperates and groups in communities (Fant 2011).

3.1.2.6 Other special development initiatives

Notwithstanding the above development initiatives aimed at poverty reduction, the GOG has also implemented different policies with similar objectives. These policies, in some instances, are designed for specific regions of the country due to the peculiar nature of poverty or underdevelopment evident.

Some of these special development initiatives include the Savannah Accelerated Development Authority (SADA), the Ministry of Inner City and Zongo Development, the Eastern Corridor Development Authority, Capital City Development Authority, Western Corridor Development Authority, Forest Belt Development Authority and the Millennium Development Authority (MiDA). In all the ecological zones where all these development authorities are mandated to operate, several projects of significance continue to be implemented with development and poverty reduction as the objective.

In general, these projects have had implications on livelihoods, the vegetation, human capital development and infrastructural development (NDPC 2005; IMF 2012). For example, in the Savannah ecological zone, the SADA – through its afforestation project – has contributed to minimising desertification and the effects of climate change. Similarly, projects in animal keeping, dress-making and rural farming, supported by SADA in the northern regions, have had signs of prospects, although public commentaries on these initiatives indicate they have been besmirched with corruption and other impropriety (Citifm 2017).

Nevertheless, the GOG continues to prioritise the poverty reduction and economic growth initiatives, year in, year out through its budgetary allocations. Programmes and projects such as the capitation grants, national health insurance scheme and rural electrifications have always featured in most annual national budgets.

Additionally, the current GOG introduced the Free Education Policy in 2018 for all senior high schools in the country, with the belief that it would scale up net-enrolment, and further minimise the financial burden on parents (Abdul-Rahaman et al. 2018). Indeed, though the project has since started, there have been substantial financial implications on the government’s ability to implement other social projects. The current government views other recent projects, such as planting for food and jobs, one-district-one-factory initiative, and the Nation Builders’ Corps (NABCO) as a revolutionary approach to creating growth poles across the country.

However, the challenge of financial sustainability continues to saddle most government-initiated development projects, due to an apparent shortfall in official development assistance (ODA) and low levels of domestic resource mobilisation. This challenge threatens the sustainability of current projects such as LEAP, NABCO, planting for food and jobs project, and even the Free Education initiative – the government’s flagship project.

3.2 Some key development challenges in Ghana

The fight against poverty and the continuous strive for development in poor communities in Ghana have witnessed some significant challenges recently. Indeed, these obstacles have had severe effects on the poor and plagued Ghana’s ability to realise the expected development outcomes. Some of these development challenges which faced past and current governments are discussed below.

3.2.1 Domestic resource mobilisation constraints

To start with, most poverty reduction and development initiatives have always suffered from resource constraints – mostly related to inadequate financial resources to scale up the project and ensure its sustainability. A significant number of poverty reduction projects in Ghana, such as the LEAP and National Youth Employment Programme are donor-financed. As such, the sustainability of these interventions is hinged on the benevolence of development partners. The relatively small nature of the Ghanaian economy, coupled with its dependence on commodity exports, limits its opportunities for sustainable growth and poverty reduction. Ghana also faces the challenge of resource mobilisation – evident in a limited fiscal space (tax revenue) to finance critical government programmes (Danquah 2006; IMF 2012; Aryeetey and Baah-Boateng 2015).

In terms of mobilising private capital, Ghana's financial system is characterised by a small financial market dominated mainly by the banking sector that provides traditional services with wide net-interest spreads between savings and lending rates (Danquah 2006). As a result, fewer individuals can mobilise finance from the banking system and the money markets to finance livelihood activities. Additionally, the capital markets are equally small, illiquid and underdeveloped with inadequate instruments for resource mobilisation. It should be emphasised that these challenges, coupled with policies characterised by short-termism, make it challenging to mobilise resources domestically to finance government projects. The country is also frequently exposed to external shocks due to its continued reliance on unpredictable external sources of finance and raw commodities export.

3.2.2 Climate change vulnerabilities

Climate change and its attendant consequences to our planet remain a topical issue in the global policy arena, and Ghana is not an exception. Indeed, climate vulnerability has been a challenge to Ghana's development – particularly in rural areas that depend solely on agricultural productivity. The north of Ghana has the highest rates of poverty in the country. However, climate change – evident in decline in precipitation and floods – has contributed to worsening the plight of many people in that part of the country (Laube et al. 2012).

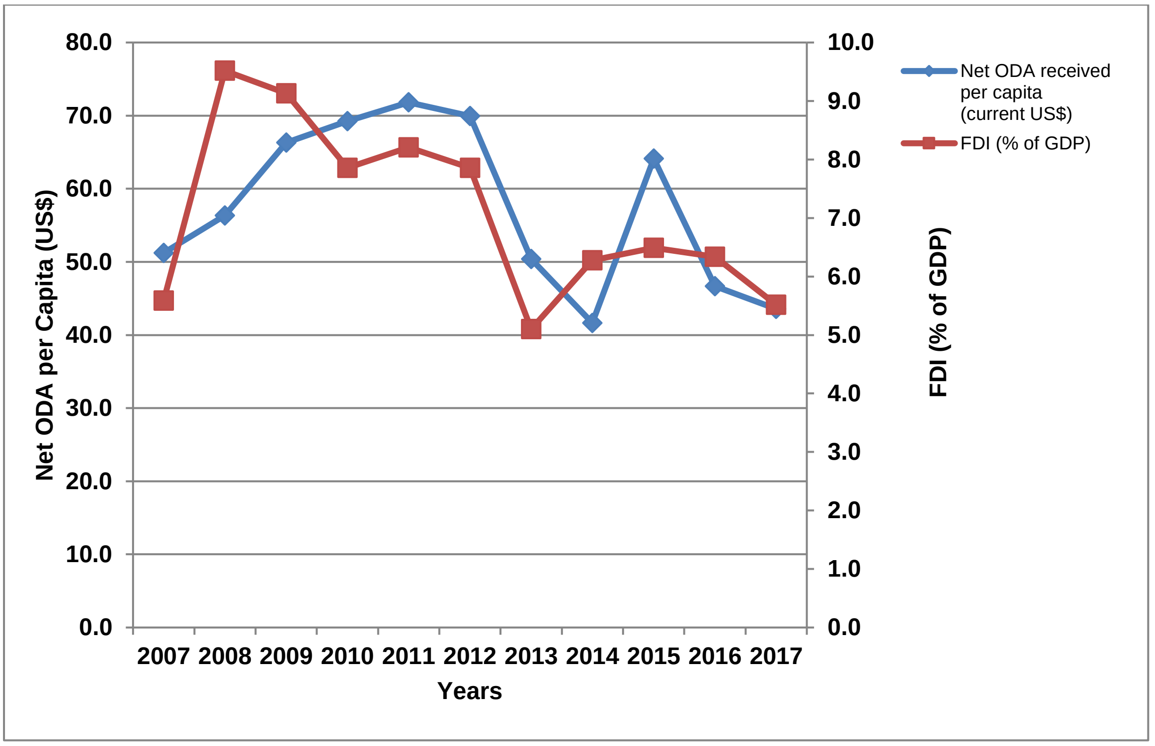
Armah et al. (2011); Glazebrook (2011) note that climate change and its associated risks have manifested in growing levels of desertification fuelled by bushfires in most parts of the northern ecological zone. This trend undermines agricultural productivity and the economic viability of this ecological zone as a potential growth pole to contribute to national development. Indeed, this challenge is further worsened by the lack of agricultural extension to rural communities and the inadequate mainstreaming of climate services (Naab et al. 2019).

3.2.3 Susceptibility to poor global economic developments

The trends in the global economic system have implications for national development in most economies. Developing countries, such as Ghana, are exposed to the adverse performance of the global economy, due to the persistent dependence on developed economies for external finance – ODA, foreign direct investment (FDI) and portfolio finance such as debts (Okoro et al. 2019). However, since the beginning of the global financial crisis in 2008 and its aftermath, external capital flows to Ghana, particularly ODA and FDI (see figure 3.2 below), have seen a downward trend.

The reduction in the flow of development financing has adversely affected Ghana's development and poverty reduction strategies. Indeed, the continued implementation of austerities measures and slow growth in many Development Assistance Committee (DAC) countries has rendered those economies in a state of flux. In recent years, Ghana's development has also been hugely stalled by the poor performance of major trading commodity prices in the international market – further reducing the country's options for growth and development (Rapsomanikis and Sarris 2007).

Figure 3.2 Declining trend of net ODA and FDI to Ghana



Source: WDI (2019)

The figure above indicates a declining trend in both ODA and FDI as a source of development finance to Ghana in recent years. On this score, the GOG needs to reassess its development finance landscape to identify new and innovative sources of financing poverty reduction and the plethora of social development programmes.

3.3 Macroeconomic context of Ghana

At independence, Ghana emerged as one of the biggest owners of reserves in the Sterling Area system due to the boom in the market for cocoa. Accumulated national savings led to a spate of infrastructure construction, including the Tema harbour, the industrial city of Tema and the Volta River power system. Overall, economic growth was relatively robust after independence until the mid-1960s.

In the period preceding 1964, the economy of Ghana became sluggish in growth and vulnerable after depletion of the country's financial reserves occurred in the same period that witnessed the failure of the market for cocoa in the 1960s. Danquah (2006) observed that during much of the period spanning 1966 and 1983, Ghana experienced negative economic growth rates.

Consequently, the general economic growth trajectory remained uneven and weak after the mid-1960s and began to stabilise after 1984. The economic improvement was because, in 1983, Ghana adopted the World Bank prescription for development in Third World countries: the Structural Adjustment Programme (SAP). This programme was known in Ghana as the Economic Recovery Program (ERP). The ERP sought to incorporate policies in Ghana's economic structure with the view to improve resource allocation, increase economic efficiency and improve the country's ability to endure domestic and global economic shocks.

3.3.1 Inflation rates

In developing countries, inflation remains a major intractable monetary policy challenge to economic stability and growth. Indeed, the Ghanaian economy has faced inflationary pressures in most periods of the country's economic history (see figure 3.3 below). Notably, Ghana experienced relatively lower inflationary rates in the years shortly after independence, with the country witnessing its first-ever double-digit rate of inflation in 1964.

Nevertheless, this double-digit inflationary era was followed by a transitory period (1967–1971) of respite with Ghana experiencing an annual inflationary rate below 10%. However, the period between 1972 to 1983 ushered in a new phase of price instability in the monetary policy regime, with generally high inflationary rates (the highest being 123% in 1983). It can be observed that the years following 1983 have witnessed the return to some form of price stability in Ghana with relatively moderate annual inflationary rates of 25% on average (Frimpong and Oteng-Abayie 2010).

It should be pointed out that inflation affects every aspect of the economy and is an essential determining factor of the level of economic activities in an economy. In effect, inflation influences the interest rates regime, which is an indispensable element of the lending decisions of financial institutions – including MFIs. Interest rates play an essential role in ensuring the efficient allocation of funds to productive sectors of the economy.

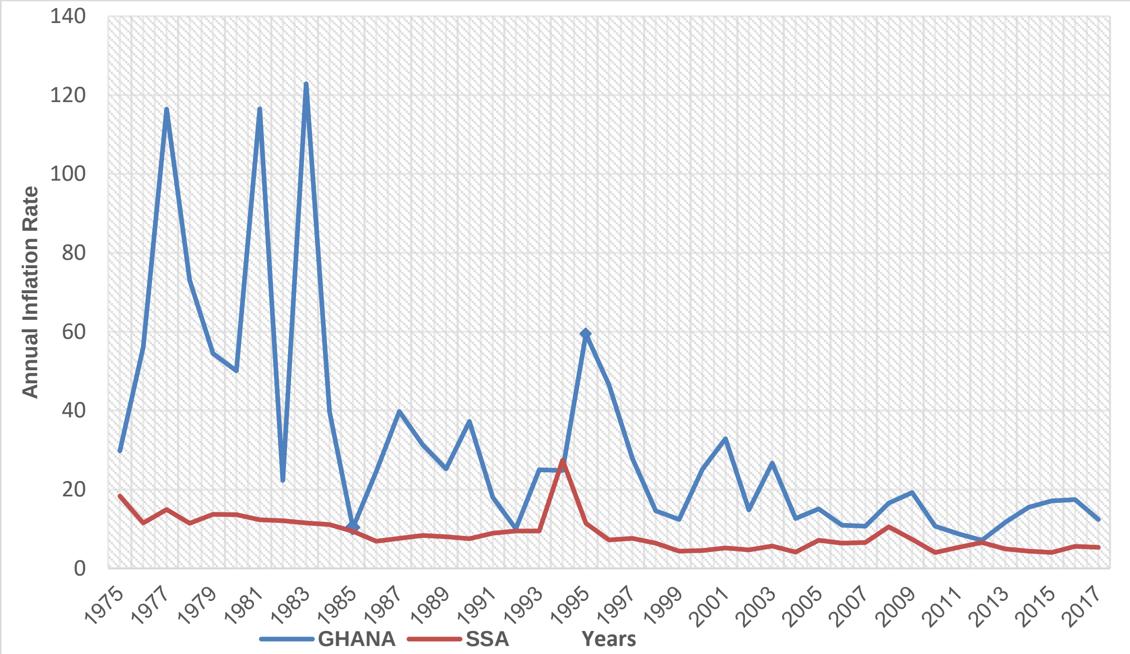
Quartey and Afful-Mensah (2014) note that lending decisions preceding the implementation of the Financial Sector Adjustment Programme (FINSAP) in 1986 have been repressive, with credit being allocated or directed to ‘priority sectors’ of Ghana’s economy without recourse to the efficiency and productivity of the funds. However, following the liberalisation of the interest rates regime under FINSAP, the cost of credit soared.

It is essential to highlight that post-FINSAP implementation saw lending rates rising to an average of about 36% between the period of 1998 to 2000 (Aboagye et al. 2008). This trend resulted in a high cost of capital to the private sector. Nevertheless, the period after the year 2000 witnessed a shift in gear, with Ghana experiencing a remarkable fall in inflationary rates, and consequently a slight drop in interest rates.

In terms of Ghana’s current monetary policy regime, the Bank of Ghana (BOG) Act 2002 precisely considers the BOG as an inflation-targeting central bank by clearly specifying in section 33 (2) of the BOG Act 617: “the Bank, in counteracting unusual movements in the money and prices in the country, shall use any of the instruments of control conferred upon it under this Act or under any other enactment to maintain and promote a balanced growth of the national economy”.

In reflecting on the poverty reduction in Ghana, it is crucial to recognise the direct and indirect role of inflation in the economic lives of people. In essence, the consumer price index (CPI) (inflation) and its reflection on the cost of living affect the majority of Ghanaian households since they rely on the market to buy essential food and non-food items. Aryeetey et al. (2006) hold that the problems of high inflation affect both the poor and non-poor alike. However, the extent to which each group of persons adopts to high CPI depends on how they each hedge against high inflation in their various livelihood strategies. In summary, the inflationary rates in Ghana have revealed an uneven pattern typified by cyclical fluctuations and sometimes high trends, as evident in 1983 – shown in figure 3.3 below.

Figure 3.3 Annualised inflation rates: Ghana vs SSA (1975–2017)



Source: WDI (2019)

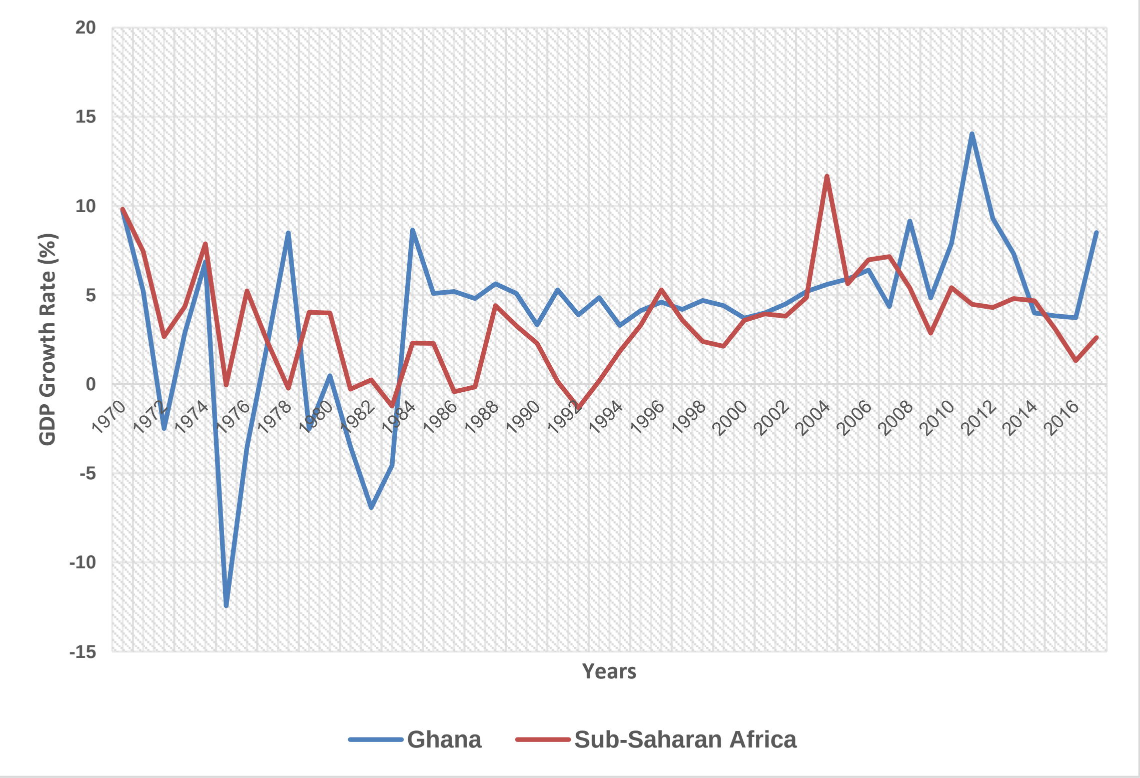
The above figure 3.3 demonstrates Ghana's inflationary trend (1975–2017). The figure illustrates different distinctive features about the observed trend consistent with the discussions above: the first trend shows three observable episodes of low, high and moderate inflationary rates; and the second relates to the cyclical nature of the trend.

3.3.2 The trajectory of Ghana's economic growth

In 2007, Ghana was touted for leapfrogging its economy to a middle-income status following the rebasing of the country's national accounts. As such, the recalculation of Ghana's GDP saw an increment in the per capita GDP of above US$1,000.

The work of Aryeetey and Baah-Boateng (2016) notes that the recovery of the Ghanaian economy following the economic quagmire that led to a recession in 1984 was partly due to the implementation of the World Bank's ERP at that time. Indeed, following this period, Ghana witnessed a somewhat strong economic growth, with 3.3% being the lowest growth rate recorded in 1994. A vital era of Ghana's growth episodes occurred in 2011 when the country commenced the production of crude oil in commercial quantities. This new source of national wealth spurred Ghana's growth to reach a peak of above 14% in 2011, with Ghana gaining publicity as the fastest-growing economy in the world that year. Figure 3.4, below, shows the trends of Ghana's growth, from 1970–2017.

Figure 3.4 Growth trajectory in Ghana (1970–2017)



Source: WDI (2018)

The above figure indicates Ghana's economic performance in the past two decades has been stable and robust, with its attendant structural change from its previous dominance in agriculture productivity to a shift towards services delivery. The structural changes did not benefit the manufacturing sector, and to date, the sector remains underperforming with few activities (Aryeetey and Baah-Boateng 2015).

Notwithstanding the recent steady growth rates experienced in Ghana, concerns about the country's ability to sustain this growth momentum over time remain up in the air. There have also been concerns about the ability of the current growth rates to translate into some form of development – the creation of decent jobs to meet the growing number of skilled and educated people in the country, and improved incomes and livelihoods. Structurally, Ghana's economy remains highly informal, with a significant source of national output emanating from the low-value-added agricultural services in the informal sector.

3.4 The landscape of development financing institutions and their framework of regulation in Ghana

The financial landscape in Ghana is characterised by formal and informal financial institutions serving different purposes and under separate regulatory institutions and legal framework. For example, universal banks[8] in Ghana require universal banking licensing to be able to undertake activities such as deposit collection, credit allocation and other services specified by law. Table 3.2 below summarises the current categories of financial institutions in Ghana and their respective regulatory agencies and authorised activities – including those involved in microfinance.

Table 3.2 Summary of financial institutions providing microfinance services & regulatory framework of Ghana

Institution	Ownership	Source of funding	Authorised activities	Regulatory agency	Legal basis
Universal Banks	Private/State	Shares and debt capital, deposits	All financial market-related activities – deposits, loans and investments	BOG	Companies Code; Banking Act
ARB Apex Bank	Rural banks; BOG	Government; international grants and loans	Regulating and supervising the activities of RCB as per the BOG laws	BOG	Companies Code, Banking Act
Rural Banks	Community-owned	GOG loans, deposits and equity	Savings; deposits; microloans; hire purchase financing	BOG, ARB	Companies Code, Banking Act
Savings &Loans Company	Private	Equity cap; grants; loans; deposits	Mobilising deposits; microloans; hire-purchase financing	BOG	Companies Code NBFI Act
Ghana Credit Union Assoc.	Credit unions	Members of CUs, deposits, grants, loans	Wholesale loans; CU Pearls training, monitoring; assessment	Registrar of Cooperatives, BOG	Law on Cooperatives (CU) NBFI Act
Credit Unions	Member-owned organisations	Members' equity, deposits, loans, grants	Deposits/savings from members, microloans, training	BOG, CUA	Law on cooperatives, NBFI Act
Financial NGOs	Private	Grants and donations	Grants and donations	BOG	Companies Code,

[8] Since 2003, Universal Banking has replaced the three-pillar banking model – development, merchant and commercial banking. It has levelled the playing field, and opened the system to competition, product innovation and entry.

					NBFI Act
SUSU collectors	Individual SUSU collectors	Fees from clients	Collection of savings and safekeeping	BOG GCSCA	NBFI Act
ROSCAs	Member-owned	Members' contributions	Members-only savings deposits	None	None
ASCAs	Members	Members' contributions	Members-only savings deposits; microloans	None	None
Moneylenders	Privately-owned	Private capital	Loans	BOG	NBFI Act
Social networks	None	None	Support to networks – financial and social	None	None

Source: (Gallardo 2002a; Yeboah 2010; BOG 2019c)

The regulatory framework provides that financial institutions are registered in accordance with Ghana's Companies Code, 1963, Act 179, that renders such entities as limited liability companies before they are issued with the banking licence by the BOG in accordance with the Banks and Specialised Deposit-Taking Institutions Act, 2016 (Act 930). Formal institutions that seek to provide non-banking financial services are supposed to be registered under the Non-Bank Financial Institutions Act, 2008, Act, 774 (BOG 2019a).

3.4.1 The financial regulatory framework and microfinance

Currently, MFIs in Ghana are regulated according to the tiered regulatory approach[9]. This approach, according to Gallardo et al. (2002), has benefited the development of sustainable microfinance in Ghana, by clearly identifying pathways for NGOs and semi-formal MFIs to become legitimate institutions under the regulatory framework with greater ability to access financial resources from commercial markets.

In another study sponsored by the World Bank, on the comparative review of the regulatory framework of Ghana and the Philippines, it revealed that "recognizing different tiers of both regulated and unregulated institutions in a financial structure facilitates financial deepening and outreach", yet warns that "legislation intended to promote microfinance may impose untenable

[9] Ghana's current regulatory framework evolved to allow for several tiers of MFIs to exist as both regulated and unregulated institutions. In Africa, Ghana has played a significant role in creating innovative strategies to allow MFIs to strive since the first credit union was established in 1955 in Jirapa and the first rural bank in 1976.

supervisory burdens, while an excessively restrictive approach may constrict innovation and expansion" (Gallardo et al. 2005: p. iii).

In Ghana, financial intermediation and credit arrangements fall within the regulatory radar of the BOG (Gallardo 2002b). The following are the regulatory and legal framework under which banks, non-bank financial institutions, including forex bureaux, function in Ghana:

- Bank of Ghana Act 2002, Act 612
- Bank of Ghana (Amendment) Act, 2016 (Act 918)
- Banks and Specialised Deposit-Taking Institutions Act, 2016 (Act 930)
- Non-Bank Financial Institutions Act, 2008 (Act 774)
- Companies Act, 1963 (Act 179)
- Bank of Ghana Notices/Directives/Circulars/Regulations

Under the current regulatory arrangement, the shareholding of deposit-taking microfinance institutions such as microfinance companies, SUSU companies, deposit-taking and profit-making FNGOs (tier 2 institutions) is restricted to only Ghanaians. The shareholding for non-deposit-taking MFIs, such as moneylenders and non-deposit-taking FNGOs (tier 3 institutions), and maybe exclusively or jointly Ghanaian and foreign.

Ghana's regulatory framework affects the development of microfinance in a myriad of ways in both formal and informal markets. Gallardo (2002a) notes that Ghana's financial regulatory framework is designed to allow FNGOs and other semi-formal institutions to establish linkages with the formal financial sector. This arrangement allows for semi-formal and informal institutions to gradually graduate into licensed and regulated financial institutions.

Also, the regulatory agencies work in close collaboration with the umbrella organisations such as GHAMFIN; this allows for the regulators (BOG and the Ministry of Finance and Economic Planning) to be acquainted with new microfinance service delivery methodologies. Furthermore, through the government's regulatory activities, tax incentives and exemptions are given to rural banks and credit unions that extend microfinance services to the poor in rural areas (BOG 2019a).

The BOG, as part of its setting prudential standards in support to RCBs, Credit Unions and S&Ls, has set less minimum paid-up capital requirements compared to universal banks. Nevertheless, MFIs in Ghana continue to provide services to only a limited array of clients and with less direct linkages with each other. As a result, a significant number of poor people in rural communities are left without access to suitable financial services. This study opines that regulators need to consider persuading or compelling MFIs licensed to provide services to the poor to do so as the law prescribes. In a nutshell, Ghana's financial regulatory framework continually encourages NGOs and other informal financial institutions undertaking microfinance to upgrade to a formal status of financial intermediation gradually.

3.4.2 Current headwinds in the banking sector in Ghana

In August 2017, the Bank of Ghana started a major exercise aimed to clean up the banking and specialised deposit-taking sectors. This exercise was necessitated by the increasing number of insolvent financial institutions and a rising rate of non-performing loans profile of these institutions. In the assessment of the BOG, the continuous existence of these financial institutions posed a considerable risk to depositors and the financial sector in general (BOG 2019e).

The clean-up led to the revocation of the licenses of 347 microfinance companies, 39 microcredit companies/moneylenders, and 15 savings and loans companies. Others included eight finance house companies, two non-bank financial institutions and nine universal banks. The revocation of these licences sent a massive shockwave through the Ghanaian financial sector, with significant cost implications to the government (ibid).

The bank of Ghana's assessment of the revoked financial institutions revealed severe challenges in the operations that contravenes the regulations specified in the BOG in accordance with the Banks and Specialised Deposit-Taking Institutions Act, 2016 (Act 930). For example, the BOG identified that the level of capital of some of the savings and loans companies, and finance house companies violated the required minimum capital. Some of these institutions were involved in excessive risk-taking with no adequate risk management framework to manage their exposures (ibid). Some of these financial institutions were also involved in the use of depositors' funds to finance personal or related-party projects or investments usually on terms that had no commercial gains, resulting in no or little operating income to financial institutions.

The clean-up of the banking sector has led to a far-reaching reduction in the number of financial institutions available to support financial intermediation, especially in the rural areas of Ghana that were previously served by some of these defanged institutions. As at August 2019, there were 137 microfinance companies, 31 microcredit/money-lending companies, 25 savings and loans companies, and 23 universal banks in Ghana (ibid). Unfortunately, most of these remaining financial institutions do not have a nationwide representation in terms of branches to serve rural communities.

It is believed that the reduction in the number of financial institutions in Ghana will have a severe ramification for financial inclusion, however, the BOG argues that the reforms will instead make financial institutions more solvent to be able to undertake effective financial intermediation and remain resilient, inclusive and supportive of the country's economic development (ibid).

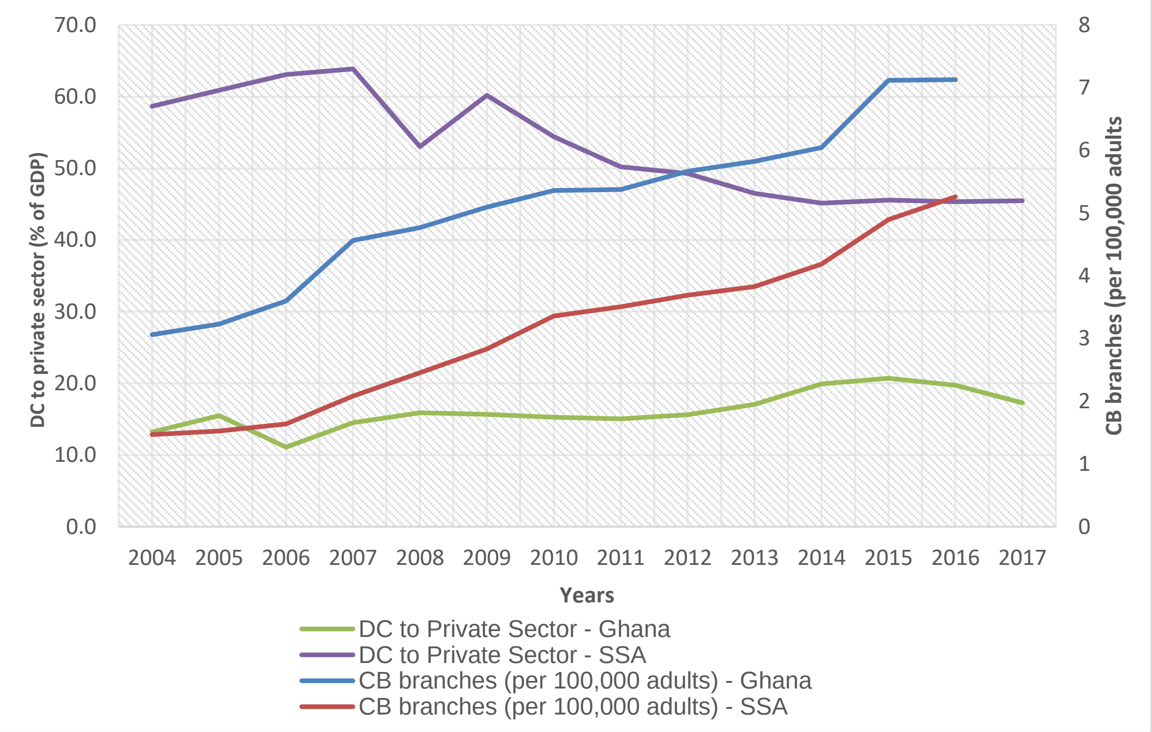
The rate of non-performing loans on books of financial institutions was also a contributory factor to the headwinds experienced in the Ghanaian banking sector. The rating agency, Moody's, believes that with non-performing loans still as high as 20.1% as of October 2018, banking assets are still at high risk. Also, with interest rates falling at the same time – monetary policy rate is currently at 17%, the lowest policy rate since 2013 – banks' income from government securities are severally curtailed[10].

From the perspective of development and poverty reduction, it is essential for the government to assess the implications of these reforms in the banking sector on the poor, particularly relating to advancing financial inclusion in rural communities. Even though banks and MFIs claim to have altruistic missions of financial deepening, they are increasingly more inclined to concentrate on maximising shareholders' wealth rather than pursuing their altruistic objectives of poverty reduction. Indeed, this concern is even more valid given the fact that most

[10] See https://thebftonline.com/2019/business/banking-finance/despite-reforms-remaining-banks-still-face-headwinds-moodys/

universal banks are situated in the urban metropolis, with limited branch activities in rural areas[11]. The figure below indicates the number of commercial banks (CB) branches per every 100,000 adult populations in the country, as well as the allocation of domestic credit (DC) to the private sector.

Figure 3.5 Number of commercial banks (CB) branches, per 100,000 adults and domestic credit (DC) to private sector as % of GDP (2004–2016/7)



Source: WDI (2019)

The above figure shows that, in the case of Ghana, while the number of CB branches to every 100,000 adult population remained unchanged between the period of 2015 – 2016, DC to the private sector had fallen sharply from 20.7% of GDP in 2015 to 17.3% of GDP in 2017. However, with the continuous pressure of population growth and urbanisation, these statistics are likely to worsen over time if nothing is done to deepen both access to financial institutions and credit availability to the private sector.

Another headwind that confronted Ghana's banking sector and contributed to the recent reforms undertaken by the BOG is the high trend of non-performing

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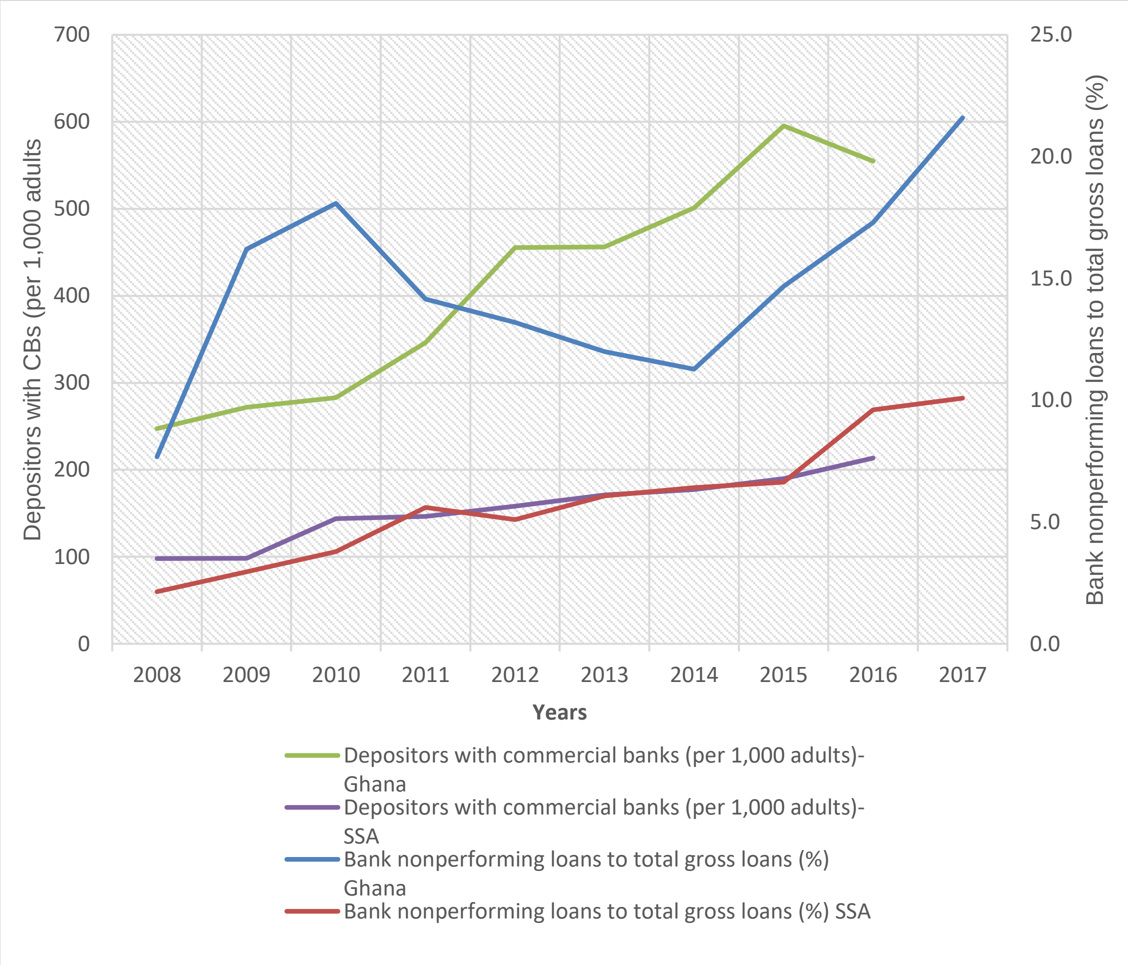
[11] For example, GN Bank, one of the few banks with branches all over the countries, particularly in rural areas was recently downgraded from a universal bank to a savings and loans company. This means that, all the towns and villages with a branch of the former GN Bank will no longer have a one.

loans (NPLs) and the declining nature of depositors with CBs. Bank NPLs to total gross loans are the value of NPLs divided by the total value of the loan portfolio (including NPLs before the deduction of specific loan-loss provisions). The banking sector strives on deposits from customers (liabilities), which are then converted into assets in the form of debts (loans) to clients to make profits. However, when clients fail to honour their loan obligations, banks can be in financial distress and will not be able to meet their commitments with the deposits.

Figure 3.6 Rising state of NPLs and the declining number of depositors with CB in Ghana (2008–2016)



Source: WDI (2019)

Figure 3.6 above shows a rising trend in Ghana's NPL stock, with a sharp increase from 11% of gross loans in 2014 to around 21.6% in 2017. The BOG monetary policy report for May 2018, indicated NPL increased from GH¢7.15

billion as at the end of April 2017 to GH¢ 8.63 billion in April 2018 (BOG 2018). Banks in the rest of sub-Saharan Africa (SSA) appear to have a relatively lower NPL as compared to the trend currently observed in the Ghanaian context. Ghana's banking sector must improve its operational efficiency and asset quality to reduce the continuous risk of NPL on bank profitability. The current trend of rising NPLs in the loan portfolio of most Ghanaian banks has led to a contraction of banks' interest income from 29.2% in April 2017 to 9.2% in April 2018 (BOG 2018). This significant reduction in profitability tends to limit banks' ability to undertake needful branch expansion activities and reach out to the poor in rural parts of Ghana.

3.4.3 Formal and informal grassroots development financing institutions

The GOG has played a significant role in making financial services available in rural communities with the implementation of various financial sector policies. Some of these policy measures included a condition that commercial banks provide loans at least 20% of their portfolio for agricultural purposes, and also the establishment of the Agricultural Development Bank (ADB) in 1965 with the sole mandate of providing loans for agriculture and allied sectors in rural Ghana. As a result, branches of GCB Bank and the ADB were opened across Ghana, with particular interest in cocoa-growing rural areas. Nonetheless, loans services to clients in the rural sector remained low. In effect, most bank branches instead concentrate on payments of cocoa farmers for purchases made by the government and deposit mobilisation from rural areas for lending in urban areas (Mensah 1993; Nair and Fissha 2010).

On this backdrop, the GOG crafted a policy to support the establishment of community banks in rural areas that would provide dedicated financial services consistent with the needs in those areas. Following this, the GOG sent a team from the BOG to study the rural banking model in the Philippines for possible replication in Ghana (Nair and Fissha 2010). Below is a summary of some development financing institutions in Ghana operating in rural communities with a focus on poverty reduction.

3.4.3.1 Rural and Community Banks (RCBs)

The first rural bank in Ghana opened to business in 1976, at Agona Nyakrom in the Central Region. As at the end of 2018, there were about 144 RCBs with branches all over Ghana. All RCBs in Ghana operate under the supervision of the Association Rural Bank (ARB) Apex Bank[12], an umbrella organisation coordinating the operations of all RCBs.

In practice, RCBs play the functions of a commercial bank within the purview of Ghana's Banking Act (2016), Act 930. They are, however, not allowed to undertake foreign exchange transactions, and their operations are limited to specific geographical areas. One of the functions of RCBs is to mobilise savings and provide credit to customers in rural areas not served by universal banks. The guidelines by the BOG on formation and operation of RCBs provide that not less than 20% of total shareholding be allotted to the community where the bank operates (BOG 2019b).

According to Andah (2005), the unique operational structure of RCBs puts them in a position to continue to provide financial services to the rural poor in a sustainable manner. Most RCBs in Ghana have consistently incorporated microfinance interventions – products and services for the poor, usually with donor support. Indeed, the operational linkages between informal financial institutions – like 'SUSU' collectors with RCBs – are also beginning to gain traction in most rural communities.

Although about 144 RCBs operate throughout the country, only 16 of them were operating in the three regions of the northern savannah ecological zone, which is considered as the poorest parts of Ghana, and are still underserved. Indeed, most of the RCBs in these regions are undercapitalised, therefore hampering their ability to serve the majority of clients.

In some instances, RCBs in the north of Ghana are situated in the urban centres with few agency offices in the peri-urban and rural areas. For example, the head office of the Sonzele Rural Bank (SRB) is located in Jirapa central, the

[12] ARB Apex Bank was established in 1998 to provide a technical and advocacy role for rural and community banks in Ghana. As an umbrella organisation, it performs some delegated functions of the BOG. As part of its functions, the bank facilitates the clearing of cheques; organising training programmes, supervision and regulation, rural deposit insurance and research and innovation.

capital town of the municipality, with just an agency office in Hain – a community, 36km from the capital. RCBs need to make their presence evident in rural communities by extending their operations to rural communities to help reduce poverty – one of the motives of their establishment.

Nonetheless, Nair and Fissha (2010) highlight that the GOG has contributed significantly to the development of RCBs, albeit, some operational gaps remain unattended. Accordingly, the authors suggest that the GOG should provide adequate resources to intensify and enforce its regulatory and supervisory mandate over RCBs. The BOG should also ensure that deposits of clients are protected by implementing various depository insurance instruments.

3.4.3.2 Savings and Loans Companies (S&Ls)

All savings and loans (S&Ls) companies in Ghana are licensed under the Non-Bank Financial Institutions Act, 2008 (Act 774) of the BOG. The BOG guidelines stipulate that all saving and loans/finance houses applications require initial paid-up capital of GH¢7 million. In the case of foreign ownership, not less than 60% of the required capitalisation shall be brought into Ghana in convertible currency.

Most S&L companies perform active financial intermediation functions, usually with SMEs, with their lending methodologies similar to MFIs (Steel and Andah 2004). Some observers hold that S&L companies were introduced into the Ghanaian financial system with the motive of discouraging the activities of informal SUSU collectors in the 1980s (Steel and Andah 2004).

It can be noted that most of these S&L companies were located in urban centres with fewer branch level activities in the rural areas, for example, the headquarters of Sinapi Aba Trust (SAT) is in Kumasi, the Ashanti regional capital. It is important to note that the design of products and services of S&Ls are centralised and, in most instances, standardised, rather than customised to the needs of the clients they seek to serve. The work of Jean et al. (2005) lends credence to the fact that S&L companies mostly design products targeted to the urban clientele, with greater emphasis on mobilising savings mobilisation from poor communities to provide loans to wealthier borrowers.

3.4.3.3 Credit Unions (CUs)

The St Joseph's Cooperative Union was the first of its kind to be established in Africa in 1955, at Jirapa in the north-western part of Ghana. It was founded by the Catholic Church in the Jirapa parish to promote savings in the community (Kirsch and Goricke 1977). By the end of 1974, the number of Credit Unions (CUs) in Ghana stood at 417, with over 53,000 members across the country (Kirsch and Goricke 1977). Currently, there are approximately 455 CUs registered with the Credit Union Association (CUA) with a cumulative asset portfolio of GH¢560 million, deposits of over GH¢475 million and loans outstanding to the tune of around GH¢290 million. Given the fact that the CU system is a member-owned financial institution, they operate the lowest interest rates in the financial system on loans contracted by their members, with payment terms consistent with their livelihood activities (Andah 2005).

According to the CUA (2019), the CU concept sought to bring together people with a common interest in society, to mobilise financial resources regularly, such that after six months of membership and contribution, a member draws on their savings in the form of a loan at a minimum interest rate. Under this arrangement, profits made at the end of the financial year are distributed among members as dividends.

CUs offer multiple types of loan products. This product menu mitigates the risk of portfolio concentration that occurs with MFIs that offer only one or two types of loans. CUs are in a better position to deliver a poverty-focused product sustainably because back-office and overhead costs can be shared with other financial services (Akenten and Ayertey Odonkor 2019).

In terms of the regulatory framework, all CUs in Ghana are supervised by the CUA. The association is also responsible for receiving and processing licence applications from prospective CUs. The BOG (2017b) notes that all cooperative credit unions and cooperative financial institutions are mandated to be licensed under the Non-Bank Financial Institutions Act, 2008 (Act 774) and Co-operative Credit Union Regulations, 2015 (L.I. 2225), the following operating rules and guidelines stipulated by the Bank of Ghana.

The work of Jankowski (1997) notes that the governance and management systems in cooperative credit unions are implemented in accordance with the principles that every member has an equal right (same vote) on how the activities of the cooperative should be governed. The basic standards and principles that underpin cooperative activities place a high level of responsibility upon members to monitor and control how CUs are managed.

3.4.3.4 Financial Non-Governmental Organisations (FNGOs)

In Ghana, NGOs are registered companies limited by guarantee – meaning they are not supposed to make profits, according to the Companies Code, 1963 (Act 179). However, the regulation of the activities of FNGOs is stipulated by the Banking Act of Ghana, under the Non-Bank Financial Institutions Act, 2008 (Act 774). Indeed, NGOs are known for humanitarian activities – including poverty reduction. This altruistic motive of NGOs suggests that they have a much broader outreach and can penetrate into the nooks and crannies of the countries if they pursue a microfinance methodology to their mission (Steel and Andah, 2003). For example, SAT, before transforming into an S&L company, operated as an FNGO with branch operations across rural Ghana.

FNGOs in Ghana are classified under tier 2 and 3 institutions undertaking microfinance activities (BOG 2019c). The BOG reports that there were 12 FNGOs licensed to operate under the tier 3 category in Ghana as at the end of 2018. However, some challenges exist in the supervision of their activities, as a result of the regulatory gap[13] evident in the guidelines for tier 2 and 3 microfinance activities. Currently, there are two types of FNGOs in Ghana.

According to (BOG 2019c) operating rules and guidelines, first, FNGOs registered to undertake tier 2 microfinance activities are permitted to take deposits and make profits; second, those registered under tier 3 activities are non-deposit-taking financial institutions[14]. A regulatory gap comes as a result of FNGOs registered under tier 3 while undertaking the activities of tier 2.

However, the illegal operations of FNGOs in Ghana persist, despite the regulatory guidelines and rules. In 2015 alone, the microfinance unit of the BOG

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[13] The regulatory arbitrage come as a result of FNGOs registered under tier 3 while undertaking the activities of tier 2.

[14] Tier 3 FNGOs are encouraged to belong to an umbrella association and those that desire to take deposits shall convert from companies limited by guarantee to companies limited by share.

revealed that about 40 FNGOs were operating in Ghana, although only 11 were licensed (Joyonline 2015). There is a need for more effective supervision by the BOG and the Association of Financial Non-Governmental Organisations (ASSFIN) to formalise the operations of illegal operators to restore confidence in financial institutions.

3.4.3.5 The SUSU collection scheme

The SUSU collection scheme is one of the oldest forms of microfinance in Ghana, with significant patronage in rural communities, especially among women. It is believed to have originated from Nigeria and gained acceptance in Ghana and other West African countries due to its practical accessibility (Asiama and Osei 2007c). As an informal financial arrangement, trust between the parties – iterant collectors and depositors – is critical. Under a susu arrangement, deposit collectors visit clients at their homes or place of business, collecting fixed instalments usually predetermined by the depositor (Alabi et al. 2007; Boateng and Poku 2019).

In essence, funds mobilised get deposited in a bank account or invested in an interest-bearing venture. However, small sums of these mobilised funds get loaned to clients in advance of their savings. The advantage the SUSU scheme has over the formal financial institutions is that collateral security is not required to borrow, as the scheme strives on guarantees to manage the risk of default. Although the credit structure is characterised by small loans, with relatively shorter maturity periods (Aryeetey 2008), the SUSU scheme is viewed to be more flexible and relatively accessible to clients for reasons of proximity.

Currently, in Ghana, it is common practice to find a significant number of individual SUSU collectors, with established operational offices (usually kiosks) in villages and towns, which clients can visit to conduct any transactions (Aryeetey 2008). However, the current mushrooming of SUSU collection agencies makes regulation and supervision difficult. Indeed, most SUSU collectors operate under the ‘grey areas’ of the regulatory framework, due to regulatory arbitrage, exposing their clients to inherent risk – including loss of deposits. The BOG operating guidelines[15] for SUSU companies, under the tier 2 category of the microfinance sector, require all their activities to be regulated under the Banking Act, 2016 (Act 918) and the Non-Bank Financial Institutions Act, 2008 (Act 774).

In terms of linkages with formal financial institutions, recent developments show growing linkages between SUSU collectors and universal banks, and S&L companies, among others. For example, since Barclays Bank Ghana launched its first microbanking scheme, aimed to mobilise individual SUSU collectors in the country, most formal financial institutions have done the same. Ghana Business and Finance note that Barclays bank's microbanking product managed to mobilise approximately GH¢47 million, and provided over GH¢1 million of loans, within 18 months of its operations (Ghana Business and Finance 2007, cited in (Yeboah 2010).

3.4.3.6 Moneylenders

Local moneylenders have been around throughout history, providing intermediation in the local financial system. As one of the oldest forms of informal (although formal ones now exist) sources of finance for individuals and households, moneylenders conduct financial mediation roles hinged on a personal relationship, between the lender and the borrower. Just as in the formal financial setting, the value of information in local moneylending business is crucial. Indeed, moneylenders need detailed information of borrowers, as well as local knowledge on the communities they operate, to gauge debtors' capacity to repay loans, to avert default.

In terms of their operational methodology, semi-formal and formal lending companies have clear loan-screening criteria that help in appraising loan applications, to monitor and enforce repayment of loans. In Ghana, moneylenders tend to provide quick and accessible loans (popularly known as 24-hour loans) to salaried workers, with structured repayment deductible from

[15] The operating guidelines categorise microfinance activities under the NBFIs act, into four tiers. Tier 1 covers RCBs, tier 2 institutions include FNGOs and SUSU companies that are deposit-taking and profit-making, tier 3 covers moneylender and non-deposit-taking FNGOs and lastly, tier 4 institutions include SUSU collectors whether or not previously registered with the Ghana Cooperative SUSU Collectors Association (GCSCA), and individual moneylenders. The current framework of regulation creates a regulatory gap between the tier 2 and tier 4 operations, that can be exploited by SUSU companies to the detriment of clients.

the borrower's monthly salary. Loans provided by formal moneylenders are mostly unsecured loans for emergencies purposes (for a funeral, school fees, medical bills) and therefore attract high interest rates.

Loans are usually taken for emergency or other purposes such as urgent medical expenses, funerals, weddings and school fees. Because of the high nature of the credit, most borrowers are unable to commit such funds into any long-term livelihood activity, such as farming and manufacturing. Currently, in Ghana, it is reported that informal moneylenders charge interest rates between the range of 10% to 100% monthly.

Moneylenders[16] are regulated in Ghana under the Banking Act of 2016 and registered under the NBFIs Act, 2008. However, informal moneylenders operating below the radar of the regulators tend to provide secured loans, using borrowers' livelihood assets as collateral. Steel and Andah (2003) note that, when collateral is needed, informal moneylenders usually demand a physical asset from borrowers that includes buildings, agricultural lands and residential lands with title deeds. The level of documentation required in such transactions is minimal, and contracts are sometimes enforced by verbal guarantees from borrowers and the head of their family. An observed strength of informal moneylenders is their relatively low transaction cost as compared to formal financial institutions.

The activities of both formal and informal moneylenders were observed in the study area. Whereas most government workers tend to borrow from formal moneylenders, the largely unemployed population depend on informal lenders. Subsequently, the operations of moneylenders have been vilified for charging high interest rates on loans to poor clients, their services are relatively available and flexible. It should be emphasised that the high cost of loans from moneylenders, and the general failure of the formal financial system to extend services to the poor has kept some individuals and households in a vicious cycle of debts.

[16] All moneylenders in Ghana are encouraged to join the umbrella organisation, the Money Lenders Association of Ghana (M-LAG).

3.4.3.7 Rotating Savings and Credit Associations (ROSCAs)

Owusu et al. (2013) note that the Rotational Savings and Credit Associations serve both as a savings and credit instrument. ROSCAs, in their traditional form, help to mediate funds between members. The system refers to a group of like-minded individuals who form an association with the sole purpose of providing financial solidarity to members. In a typical ROSCA, each member of the group makes a periodic contribution of a predetermined amount at the start of the scheme. These contributions are then given to the member at a time until the cycle is complete.

The importance of ROSCAs can be viewed from the fact that there is no need to keep the money in a 'safe' making it available on demand. Also, the system of record-keeping is accessible to all calibre of group members (Collins et al. 2010). Nevertheless, a ROSCA does not provide the level of flexibility needed to respond quickly to a livelihood crisis or household emergencies. In most cases too, the amounts involved in the regular savings are small and take a longer time to accumulate large lump sums.

In the study area, ROSCAs were a typical system of mobilising financial resources, particularly among women in the rural and peri-urban areas. Since they always require fixed amounts to be paid over an agreed number of months, members cannot react to sudden changes in income, and in turn are unable to pay their monthly share, which could cause the system to collapse (Churchill and Frankiewicz 2011). Similar to ASCAs, most ROSCAs in the study area do not have any vertical linkages with formal financial institutions to provide any form of supplementary money management services.

3.4.3.8 Accumulating Savings and Credit Associations (ASCAs)

Most savings groups in recent times are an improved form of the traditional ASCA. ASCAs practically provide members with an accessible, secure avenue of saving their funds. Members can also borrow from the pool of funds in small amounts and on flexible terms, and also provide affordable insurance services (Ledgerwood and Rasmussen 2011). Typically, these forms of groups are made up of 15 to 25 peer-selected members that hold regular meetings and encourage regular savings; and amounts are conditioned to group members' ability. In effect, pooled funds are then drawable to members as loans at subsidised rates.

In terms of record-keeping, group participants' savings and lending transactions are documented in individual passbooks or a simplified group central ledger. In the context of the study area, ASCAs have leaders who are responsible for the daily/periodic record-keeping of the group. All group members' financial transactions are recorded in a notebook, formatted to the needs of the group. Indeed, groups have separate books for recording savings and for loans.

Nevertheless, in the spirit of transparency and accountability, each member gets a receipt from the group secretary for any transaction undertaken. Unlike ROSCAs, an advantage of this system is that borrowers from the pool of funds do not necessarily need to deposit their savings in advance and members have the chance to save surplus income. Indeed, non-members can also borrow from the group, at a relatively higher interest rate; this contributes significantly to members' accumulated savings.

The lack of linkages between informal and formal financial institutions remains a significant challenge as financial deepening has been widely observed in the Ghanaian financial system. In the Jirapa municipality, for example, it was observed that most ASCAs use wooden money boxes to save members' deposits. Such a practice is a source of risk to the group, particularly when the money is saved with known persons in the community, who are group leaders.

A vertical linkage with the formal sector will ensure that banks, MFIs and S&L companies provide a secured savings scheme to these groups that meet/provide similar characteristics of accessibilities that members desire.

3.4.3.9 Social networks

Social networks in this context refer to family, related organisations and friends who constitute a form of financial reservoir which people draw on. Ghana has no public social welfare system, and it is these social networks which perform that role. The influence of social networks as a financial resource is usually understated, especially in rural areas of Ghana. Traditionally, the extended family is the first port of call when a member requires financial resources for any venture or in an emergency. Members of the extended family are required to offer financial assistance during times of emergencies and crises such as bereavement, illness, drought and floods.

In most parts of Ghana, children are obliged to take care of aged members of their extended family. In recent times, remittances from people abroad to their extended family members in Ghana has become a vital source of financial assistance.

According to Addison (2004), remittances (unrequited private transfers) increased from around US$200 million in 1990 to about US$1 billion in 2003. Indeed, remittances, as a form of income, have come to be a significant flow into Ghanaian households. In 2015, Ghana received the second-highest amount of remittances to sub-Saharan Africa, totalling $2 billion (Ratha 2016). Indeed, the Central Bank of Ghana suggests that informal transfers are at least as high as recorded flows.

3.4.3.10 Mobile Money Operations (MoMo) in Ghana

Financial inclusion matters in poverty reduction. Mobile Money Operations (MoMo) innovations offer a new window of ensuring financial inclusion in Ghana. This section reflects on the potential of MoMo as an innovative alternative source of development finance and as a platform for financial intermediation. The current innovation that has revolutionalised the financial services landscape is the recent introduction of Mobile Money Interoperability (MMI). In 2018, the GOG, through the BOG, implemented the MMI to support the smooth transfer of funds across various mobile money operators in the country. The policy aims to encourage financial inclusion, particularly among the poor living in rural areas where formal banking institutions are scarce.

Following the introduction, various MoMo platforms[17] have sought to transform the delivery of financial services remarkably – with some mobile

[17] The Mobile Money Operators (MMOs) provide mobile infrastructure, customer base and agents' network. The MMOs are profit-maximising entities which issue electronic-money which is held in the banks. Banks provide infrastructure for flow of money between two parties and therefore provide physical custody of the electronic money. Every unit of electronic money that is issued by the Mobile Network Operators (MNO) is backed by an equivalent amount of Bank of Ghana notes and coins held in a bank to ensure equilibrium in the MM market.

telecommunication companies providing cash loans through their MoMo platforms. For example, MTN Ghana Limited introduced its QwikLoan product to provide cash credit to its customers.

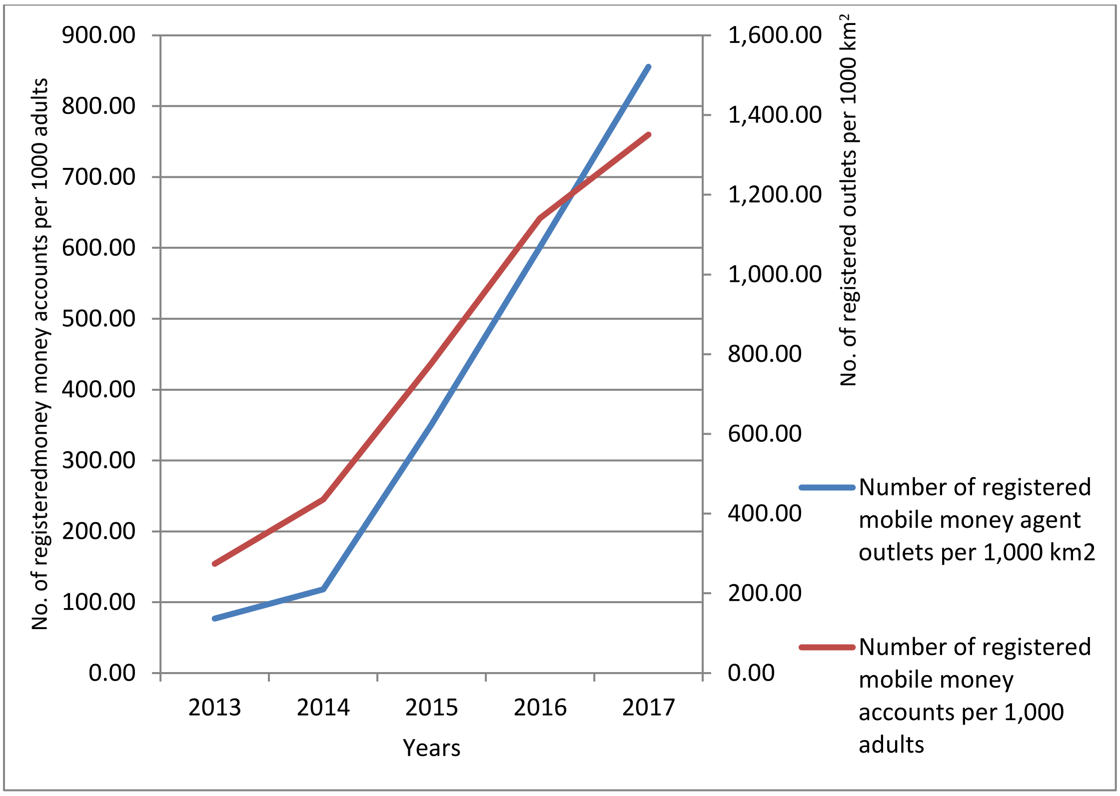
The MTN QwikLoan service is an innovative financial solution by AFB Ghana and MTN MoMo that provides a quick and convenient loan to subscribers of MTN MoMo. It is a short-term, unsecured, cash loan paid into the customer's MTN Mobile Money wallet. The loan is accessible and straightforward, with no previous savings required.

The MoMo landscape has become an essential means of facilitating payments for both the unbanked and the underserved people/communities in Ghana. It is fair to indicate that the recent speedy growth in the usage of MoMo services in Ghana is partly because of increasing penetration and dominant use of mobile phones, particularly in rural communities where formal banking services are uncommon.

Moreover, GSMA (2017) holds that the proliferation of MoMo usage profoundly among the unbanked and underserved is partly because of the advancements that have characterised most mobile handset functionality, chip and mobile network technologies, and also the upgrades in point-of-sale (POS) infrastructure. By and large, these recent developments in the technological landscape have significantly improved the atmosphere for the expansion of MoMo solutions that have brought together different industry players – notably, banks and MoMo operators. Without any equivocation, the transformation in the MoMo industry has contributed to the creation of a new financial ecosystem that has created employment and led to a convenient, speedy, flexible and affordable payment system that benefits the poor (GSMA 2017).

In terms of Ghana's MoMo demography, based on statistics from the BOG, there were more than 8 million active mobile money accounts (less than 40% of the population) at the end of 2016. Remarkably, this increase in the use of mobile money services has provided a vibrant increase in financial inclusion among the Ghanaian population, especially the poor in the hinterlands, that would otherwise not have occurred (GSMA 2017). Figure 3.7 shows the rising trend of mobile money operations in Ghana, with an increasing level of registered MM agent outlet availability across the country.

Figure 3.7 An increasing trend of mobile money operations in Ghana



Source: IMF Data (2019)

The Central Bank of Ghana opines that a well-functioning payment system is essential for ensuring the reliability, safety and economic stability of a financial system. Consequently, the level of efficiency embedded in the available payment system enables the timely execution of financial transactions that translate to an enhanced job creation environment, spur economic growth, reduce poverty and contribute to an improvement in the standard of living of people. In effect, the deepening in payment systems reflects in aspects of the economy through its inter-linkages with the fiscal, external and the real sectors (BoG 2017a).

In Ghana, about 16% of total annual production is sold through formal procurement channels, such as MoMo. It is envisaged that about 3.5 million new MoMo accounts are likely to be added by 2020. These new subscribers would further facilitate the digitising of business operations from business-to-person (B2P) and government-to-person (G2P) payments. Current projections by the GSMA suggest that mobile operators could derive an estimated $13 million for B2P payments and another $1.1 million for G2P payments by 2020 (GSMA 2016).

Moreover, the current digitisation drive led by mobile operators would revolutionise the agricultural payments services. Indeed, the digitising agricultural payment systems would not only inure them to the benefits of mobile operators but governments and the poor rural farmers too. For example, when the cost of payments/transfers is significantly lowered by the real-time and scalable payments to rural smallholder farmers living in remote rural communities, it helps to mitigate risk associated with cash-handling, such as theft.

3.5 Jirapa municipality: Physical features, economic and sociocultural setting

The study area, Jirapa municipality until 2018, was a district under Ghana's local government decentralisation structure. The Jirapa district was established by LI 1902 as part of Ghana's plans to deepen decentralisation processes. The municipality is located in the north-western side of Ghana's Upper West Region. The Jirapa municipality lies between latitudes 10.25 degrees and 11.00 degrees North, and longitudes 20.25 degrees and 20.40 degrees West. The total land size of the municipality is approximately 1,188.6km^2, reflecting 6.4% of the total landmass of the Upper West Region (GSS 2013a; GSS 2014).

The Jirapa municipality shares its territorial borders to the south with the Nadowli-Kaleo District, to the north with the Lambussie-Karni District, and to the West with Lawra municipality. The municipality also shares its boundaries to the Far East with the Sissala West District. The municipal capital, Jirapa, is 62km away from Wa – the regional capital. The location of the municipality offers a unique development advantage, in the areas of tourism, agriculture and mineral extraction (GSS 2014).

3.5.1 Physical characteristics: climate and vegetation

The Jirapa municipality is located in the tropical continental climatic zone with an average annual temperature varying between 28 degrees Celsius to 31 degrees Celsius. The extremely hot temperature in the area offers considerable potential for future solar development to augment Ghana’s energy mix. The climatic zone experiences a single rainy season during April/May–October. Also, the rainfall pattern is irregular, therefore making it challenging to predict for any cropping year; this is because a long period of little or no rain frequently interrupts the rainy season. The irregular nature of the rainfall pattern is made worse by recent adverse trends of climate change, and its negative effects on partial or total crop failures.

The Jirapa municipality also experiences the harsh Harmattan Season between November to March. This period of the year is characterised by intense, dusty, cold and dry winds blowing from the north-east of the Sahara Desert. The harsh weather experienced during this period usually leads to fatalities caused by outbreaks of the cerebro-spinal meningitis (CSM) epidemic, and the increased reports of snake bites (GSS 2014).

In terms of vegetation, Jirapa is generally made up of the Guinea Savannah woodland with some light undergrowth and medium-sized trees that are primarily scattered. The shea, dawadawa, baoba and neem are significant economic trees in the vegetation. However, activities such as bush burning, tree felling for fuelwood and charcoal burning, coupled with improper farming practices, have negatively affected the vegetation. The municipality has no significant forest vegetation or reserves, there are a few isolated and undeveloped tree/forest conservations at Somboro, Tuolong and Yagbetuolong along the Black Volta.

People living along the Black Volta lake and its tributaries engage in dry season farming or gardening using the water from the lake. Indeed, the valleys around the tributaries of the Black Volta are appropriate for future small-scale development of irrigation dams and dugouts to broaden the scope of livelihoods currently available for residents. As at now, communities such as Konzokala, Tizza, Jirapa and Ullo have developed localised small-scale dams and dugouts that provide a source of employment to residents. In terms of topography, Jirapa is generally flat, with an average height of 300m above sea level, and with a few plateau surfaces in the Yagha community (GSS 2014).

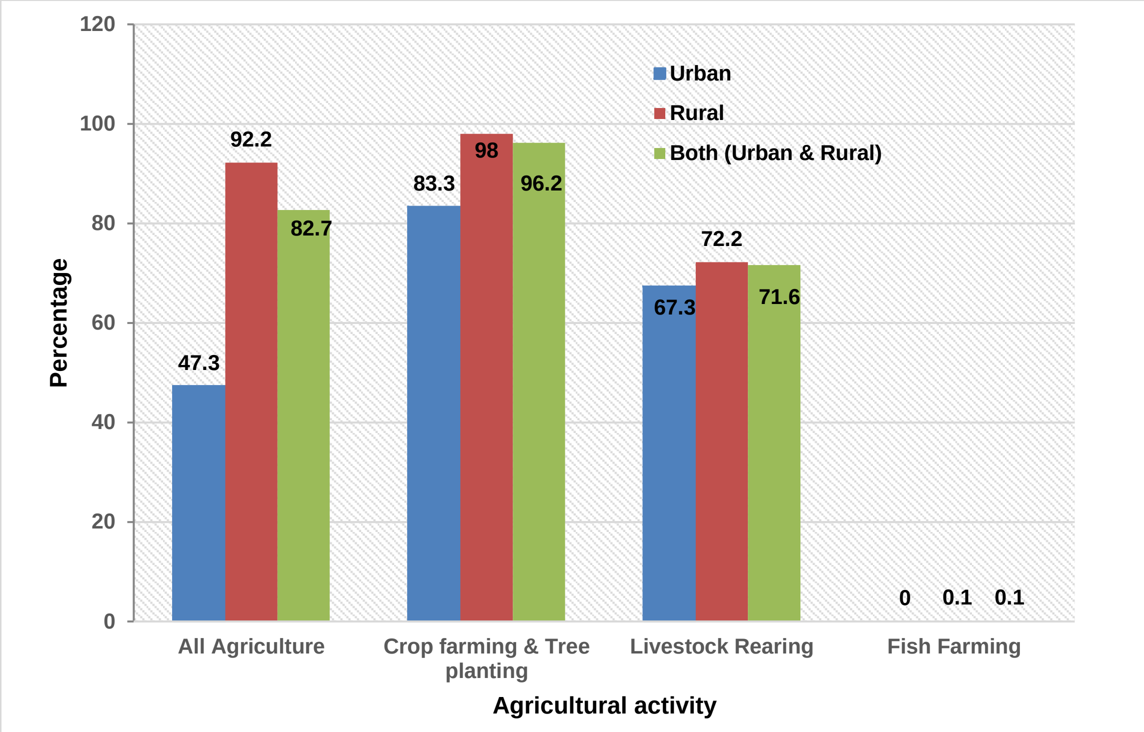
3.5.2 Economic characteristics of Jirapa

The economy of the municipality is structured around agricultural activities, services, agro-processing and other small-scale manufacturing activities. For this study, primacy was given to agricultural activities and the services sector – tourism and financial services.

3.5.2.1 Agricultural activities

Agriculture is the backbone of the local economy of the municipality. As at the last PHC in 2010, 67.1% of people were estimated to be engaged in agriculture – which remains peasant and subsistence in nature (GSS 2014). However, very few agriculturalists are engaged in large-scale production of cereals and legumes in the Hain and Mwankuri localities of the municipality. The main cash crops grown in the municipality include cotton, groundnuts and cashew. Shea nut is also an important cash crop found in this area, but it is still considered a wild tree with economic potential that needs to be harnessed. The figure below shows the distribution of households involved in various agricultural activities across rural and urban settings of the Jirapa municipality.

Figure 3.8 Proportion of households engaged in agriculture in Jirapa municipality



Source: GSS, PHC (2010)

The above figure shows the primacy of agriculture in rural areas relative to urban areas. At the household level, GSS (2014) notes that about 82.7% of households were engaged in agriculture as at the last PHC. However, a large number of rural households are believed to be involved in agricultural activities. The GSS reports that 92.2% of households in rural localities are involved in agricultural activities as compared to 47.3% of urban households. Moreover, a significant proportion of households in the Jirapa municipality (96.2%) are found to engage in mixed farming – crop farming and livestock rearing.

The common crops cultivated in both rural and urban areas include, among other things, groundnuts, beans, maize, millet and yam – these crops reflect the native diet of households. Also, common livestock reared includes, among other things, cattle, sheep, goats, pigs and poultry, which are mainly produced as a supplement to crop farming.

A few farmers in the Hain and Ping localities are engaged in large-scale livestock production. Generally, livestock keeping in the upper west and particularly in the Jirapa municipality has a much more cultural significance, rather than a business venture. For example, cattle rearing is a common practice among the Dagaaba[18] people as a symbol of family wealth and ability to pay a bride-price during a marriage ceremony.

3.5.2.2 Tourism sector

Tourism in the municipality remains underdeveloped. Indeed, the potential of tourism to reposition the Jirapa as a growth pole in the Upper West Region is yet to be adequately explored by both local and foreign investors. However, the recent construction of Lloyd’s Ville hotel and its complementary businesses, such as a water treatment plant and a power supply plant, is a game changer in the tourism sector in the municipality.

Nevertheless, the geographical location of the Jirapa municipality means it has a central location, in terms of easy access to several tourist attractions. Some known tourist attractions in the municipality include, among other things, the Wulling Rock Pedestals – mushroom-shaped rocks with some human faces; the Bayong’s footprint at Ullo – during the Babatu-Samori wars, the legendary Bayong of Dantie left his footprint on a Baobab tree in a locality called Bayongyir. Other attractions also include the annual Dawadawa (Bong-Ngo) harvest festival – celebrated by the Chief and people of the municipality to mark the beginning of the farming season. Another tourist site with some mystical beliefs is evident in Gbare – donkey footprints. The donkey is the great leader; Dootoraa of Gbare left footprints on a rock surface in the village not far from Jirapa. Others tourist sites that have not yet been adequately explored also include the stone-built Catholic Church – the oldest in the Upper West Region, and Python Sanctuary – located at Jefiri close to Jirapa.

In terms of the services sector in Jirapa, it is underdeveloped with few service providers. In the telecommunication sector, the municipality has three mobile network providers, including MTN, Vodafone and AirtelTigo. All communities have at least one network provider, or none at all. Jobs have been created as a result of the activities of these network providers – notably with the sale of mobile recharge cards, and with MoMo operations helping further deepen

[18] The major tribal group in the Jirapa municipality.

financial intermediation in the municipality (as previously discussed above).

3.6 The institutional context

This aspect of the chapter delved briefly into the background of the three institutions involved in the study. The brief institutional context took into consideration, among other things, how the various organisations were established and their objectives, as well as the products and services offered.

3.6.1 Background of Sinapi Aba Trust (SAT)

SAT was initially registered as a financial non-government organisation (FNGO) in 1994, transformed into the Sinapi Aba Savings and Loans Company on 28th March 2013, headquartered in Kumasi, Ghana. It is a non-banking financial institution licensed under the Non-Bank Financial Institutions Act 2008 (Act 774). However, the commercial wing of SAT operates as an S&L company, while the poverty reduction component remains an FNGO – the Trust Bank system. All loan and savings activities that were previously managed by the Trust are now under the care of the S&L company. Sinapi Aba Savings and Loans offer a variety of loan and savings products.

SAT now focuses on non-financial services such as transformation, capacity-building training, research and development, marketing activities, corporate relations and projects management. Both institutions thus work together in transforming the lives of the economically active in Ghana. The mission of SAT is to "serve as a mustard seed through which opportunities for enterprises development and income generation are provided to the economically disadvantaged in society to transform their lives".

Some of the products and services provided include individual lending – where individual clients can apply for credit by providing all the necessary documentation and collateral requirements. SAT also has the Trust Bank lending product – this lending method is modelled to harness the social capital among groups. Other products offered by SAT also include solidarity group lending – this is similar to the Trust Bank lending model, except that it has relatively few people in each group, and loans accessed are much larger than the Trust Bank.

Additionally, SAT also has in place an asset-based lending scheme, where clients are supported to acquire production equipment or assets to support their livelihoods. The client welfare scheme[19] of SAT is a form of insurance cover on loans of group members.

3.6.2 Background of St Joseph's Cooperative Credit Union (CCU) – Jirapa

The St Joseph's Cooperative Credit Union in Jirapa was the first of its kind to be established in Africa. Rev. Fr John McNulty, a Roman Catholic priest, conceived the idea of setting up a credit union. The founders believed that providing an avenue for people to access essential financial services – savings and small loans – would go a long way to improve their standard of living. From this background, the cooperative credit union started in September 1955, in Jirapa, in the Upper West Region of Ghana. From a humble beginning in a small town in Ghana, the concept and operational style of cooperatives spread across the fringes of Ghana and beyond.

The formative years of the St Joseph's CCU benefited from the social capital established through the church/parish groups, and some of the community cooperative farming associations. Access to markets was considered a significant challenge faced by many farmers in the operational communities of the CCU. As such, one of the bold initiatives undertaken by the CCU was the acquisition of a vehicle to help transport members' wares to the market. The understanding was that, once farmers were able to gain access to the market, it would provide members with the financial resources to be able to save. Consequently, increases in savings would enable the credit union to perform its other core mandate of financial intermediation – efficient credit allocation to members.

Also, under the aegis of St Joseph's CCU, a significant number of rural poor have been able to access financial services to improve their livelihoods. The CCU continues to provide various services, including microfinance, as well as non-financial training to its members and the general public.

[19] This scheme was designed to cover the risk of group members dying or suffering from severe illness that could affect the ability of individuals and their groups to repay loans.

3.6.3 Background of Sonzele Rural Bank (SRB) – Jirapa

The Sonzele Rural Bank (SRB) was incorporated in 1980 and granted the licence to operate the Business of Banking by the Bank of Ghana on 24th November 1983, in Jirapa, in the then Jirapa/Lambussie District, Jirapa municipality of the Upper West Region. The bank was established to offer financial intermediation to the people within its catchment area through effective fund mobilisation, fund management and the provision of sound credit. The bank currently operates one agency office in Hain (also in the municipality) and three other offices in Wa (the regional capital), Nadowli and Lambussie districts.

The mission of the SRB Limited was established mainly to encourage savings among the people in the community through the mobilisation of idle funds from its catchment area and channelling such financial resources into local businesses in the form of loans for the financing of various economic activities in the locality. The SRB aims to continue to pursue the development of its skilled workforce, that is dedicated to quality professionalism and the maximisation of shareholders' investments. Some of the microfinance products offered include: Sonzele La Kpieo group loans – given to support individuals in groups expand their businesses, and the Suntaa credit with education product – providing credit and supported by business training to individuals in the same line of business.

3.7 Chapter summary

This chapter discussed various contextual issues of relevance to the study. It shed light on the institutional profiles of the various MFIs studied. The importance of this was to establish a connection between the various contextual issues – country, community and institutional – and the essence of the research. This chapter also touched on some poverty reduction policies pursued in the past and examined their progress and challenges. Regarding the financial landscape, it is apparent that the legal and regulatory framework governing Ghana's banking sector is conducive for financial deepening, although some gaps remain unfilled. It was revealed that the structure of the banking sector supports the establishment of various RCBs, S&L companies, among others, yet linkages between these institutions and the informal financial markets remain weak. A current review of the banking sector indicates that the sector faces some stressors – issues of NPLs and limited branch expansion. Indeed, even the level of interconnectedness between universal banks and formal rural financial institutions remains underdeveloped.

CHAPTER 4

RESEARCH METHODOLOGY AND ANALYTICAL FRAMEWORK

4.0 Introduction

This chapter presents the methodology and analytical framework of the study. It identifies the theoretical approaches that will enable the tackling of the research problem. The chapter constructs a framework that provides a guide to the rest of the thesis: the selection of the area of study, construction of data collection instruments, data collection and data analysis. The analytical framework helps to decipher data logically and systematically with the view of revealing knowledge from the concepts and theories adapted for the study. The chapter begins with the identification and discussion of the theoretical approaches for the investigation of microfinance in rural areas. The theoretical approaches guide the formulation of the research questions and sub-questions of the study, which are presented next.

4.1 Analytical framework[20]: The Sustainable Livelihood and M4P approaches

The analytical framework[21] represents the researcher's conceptual and logical thoughts on how to decipher the data to answer the research questions. DeLong et al. (2003) define an analytical framework as an intellectual tool designed and employed to generate and systematise interpretations of complex situations in research. The main objective of the analytical framework was to identify suitable quantitative and qualitative strategies that take into account the contextual issues of clients of microfinance.

The study aimed to identify robust methodological and analytical approaches that will guide the answering of the research question and address its objectives. The SLA and M4P approach were identified as appropriate for

[20] The analytical framework for the study derives its theoretical underpinnings from the SLA and the M4P approaches. For the purposes of the analysis, the study adopts only the aspects of these approaches that were deemed consistent and relevant to addressing the research objectives. For clarity, excerpts of the SLA helped to address the first two questions and objectives, while the M4P approach contributed to examining the third.

[21] See figure 1 of appendix 4 for the analytical framework for this study.

addressing the research question. It is worth reemphasising that the central objective of the study was to assess microfinance product design and implementation processes and the implications they have on clients' households. The study adapted components of the SLA that were considered relevant to understanding the vulnerability context and livelihood strategies of clients and their households.

Additionally, excerpts of the M4P approach also constituted an important component of the analytical strategy and framework, as shown in figure 1 of appendix 4. The blend of relevant components of the SLA and M4P helped to design the research instruments (questionnaires and interview guide) and served as a critical guide throughout the empirical analysis. The components of the SLA and M4P approach that have been adapted for this study are briefly explained below.

4.1.1 Sustainable Livelihood Approach (SLA)

To examine how microfinance products and interventions are designed and implemented from the viewpoint of clients, it is crucial to argue that building a solid understanding of the contextual issues that saddle the daily livelihoods of the poor is of the essence. The work of Johnson and Rogaly (1997) suggests that cross-sectional studies on microfinance usually offer a limited level of attention to contextual issues of clients such as poverty context and livelihood strategies, including their vulnerabilities.

Accordingly, such studies often do not spend time to explore the germane issues necessary to building an understanding of the complexities that define the daily livelihood strategies of the rural poor and how their financial needs could be met through microfinance interventions. Consequently, the many unmet financial needs of the poor in rural communities that have been left under the radar of microfinance research continue to be excluded in institutional product design processes. Livelihoods matter in all aspects of human endeavour. It is important to take into context livelihood related issues in the design of products and policies for sustainable poverty reduction.

Following the research gap mirrored in the relatively low attention to livelihoods issues of microfinance clients, the research adopted and applied the theoretical concepts of the SLA to address the research objectives and questions. In order to effectively apply the philosophical ideas that underpin the SLA to this study, it is vital to establish why and how the theory suits this research as an analytical approach to address the research problem.

Applicability of SLA to microfinance: Why the SLA?

The work of Chambers and Conway (1992) defines it as: "A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term" (p. 6).

The preoccupation of this study is to explore how the concept of sustainable livelihoods is applied in the field of development finance, particularly in the design and implementation of microfinance products or interventions capable of addressing the livelihood constraints of the poor. The application of the SLA concept by MFIs in the product designs would help improve clients' ability to improve and maintain their livelihoods in the context of vulnerabilities and stresses. Bebbington (1999) asserts that a well-integrated understanding of SLA ensures that socioeconomic welfare and poverty are linked to livelihood choices and strategies. An enhanced and holistic application of SL, especially in the design of pro-poor policies and products, ensures that the context of people's capacities and livelihood assets are improved to support the quality of life, while further reducing the potential vulnerabilities that confront the socioeconomic conditions of the poor (ibid).

The applicability and interpretation of the SLA can be viewed from different perspectives. Farrington (2001) suggests that the SLA can be interpreted in three different strands: first, from a normative perspective, the concept helps to specify how development interventions should be structured; second, as a principle for action or a development objective; and third, as a framework for analysis. The position of this thesis is to deploy some aspects of the SLA concept as an analytical tool[22]. This thesis applies both the philosophical underpinnings and framework of SLA to address the research problem sufficiently. In terms of the applicability of SLA as an analytical tool, it enabled the researcher to formulate realistic research objectives and questions consistent with the research problem. The SLA offers some level of flexibility in assessing how MFIs design the products and interventions, taking into context clients' poverty dynamics, livelihoods and vulnerabilities. Kaboski and Townsend (2005) argue that the SLA offers the opportunity to examine the varied intricacies involved in rural livelihoods as a suitable framework for understanding microfinance interventions.

Why is the SLA relevant in the context of microfinance?

The provision of financial services to the poor and those excluded from the financial system represents an important component of microfinance. The SLA and microfinance are both people-centred and focus on the poor. Toner and Franks (2006) postulate that the SL framework places emphasis on the poor in its analysis to unravel the level to which interventions recognise people's livelihoods as a basis for action and to ascertain whether the priorities of the poor are consistent with the design of microfinance products.

The SL is an integrated framework that prioritises people's abilities and livelihood assets, and rather than resources or institutions and their performance (Ellis 1998; Robson 2002). In this understanding of the SLA, researchers and policymakers are encouraged to examine the extent to which beneficiaries of development interventions are jointly involved in the design processes of products and services. In the context of livelihood analysis, Scoones and Wolmer (2003) hold that policymakers and researchers alike are advised to analyse the existing livelihood characteristics of beneficiaries as a background to an assessment of development interventions. The SL framework deploys a multi-dimensional understanding of the inclusive and multi-faceted nature of people's livelihoods, taking into consideration different entitlements and assets that individuals possess.

[22] The analytical framework for this study deploys aspects of both the SLA and the M4P approaches to critical analysis (see figure 1 of appendix 4 for the analytical framework).

Understanding the SLA in the context of microfinance ensures that product designs are not only consistent with the daily activities of the poor but also reflect the broad household livelihood spectrum. The study believes an effective way of ensuring the needs of clients are linked to microfinance products is to continually learn from their lived experiences. In this direction, the SL framework is viewed as essential since it emphasises learning from the lived experiences of people in an intervention. Interventions designed along the SL framework allow for poor people to negotiate their livelihood options and strategies to ensure that they are consistent priorities of the intervention (Carney 1998; Ellis 1998; Carr 2019; Olawoye 2019). Designing financial services along the basic building blocks of the SLA framework ensures clients' livelihood strategies and vulnerabilities are consistent with the designed financial tools.

4.1.1.1 Livelihood strategies

The idea of clients' livelihood activities was a leading concern for this study and appeared dominant in the formation of the research instruments. The study was interested in establishing how microfinance product designs reflect the livelihood needs of their clients. Since the primary source of livelihoods in the study area was agriculture-related, it sought to analyse the many different livelihood strategies and shocks, as well as coping mechanisms available to clients.

The study argued that microfinance interventions that sought to support clients mitigate their shocks/vulnerabilities, while increasing their assets base, have the potential to reduce poverty. MFIs can apply the SLA to build a good understanding of the livelihood strategies of their clients and appropriately target customised financial tools to meet their needs. Since agricultural productivity has a positive knock-on effect on household outcomes, supporting various forms of agricultural activities could drive the growth of local economies and reduce household poverty.

4.1.1.2 Vulnerability context: Seasonality and livelihood shocks

Another essential element of the SLA is that it supports policymakers in undertaking critical analysis of the vulnerability context of the people or communities in an intervention. An analysis of the vulnerability context of stakeholders in an intervention helps to practically identify the factors in the external environment that could undermine the livelihoods of people. Indeed, poor people face dangerous trends that primarily influence their livelihoods and deplete the broader availability of their assets due to shocks and seasonality that confront them – in a manner which they have limited or no control over (DFID, 2007). The SL framework supports that interventions take into context the myriad of livelihood activities that are affected by seasonality (changes in prices, production, health and opportunities for gainful employment). As such, the study postulates that MFIs need to take the issue of seasonality into account when developing products. The seasonality of people's livelihood strategies does have the potential to affect their livelihood outcomes – poverty, wellbeing and food security.

According to DFID (2007), the level seasonality that affects people in the context of their vulnerability varies according to persons and their sources of livelihood. In the study area, other aspects of rural livelihoods that are also affected by the seasonality and livelihood shocks include: price hikes of food commodities during the rainy and lean seasons. Most farmers also suffer shocks of falling prices of farm produce during the harvest season, where there is a high supply of foodstuffs in the market compelling farmers to sell at farm-gate or giveaway prices.

4.1.1.3 Managing shocks and livelihood diversification

Livelihood diversification is one way of managing shocks (Ellis 1998). The increased level of diversification is linked with both livelihood coping and distress under deteriorating livelihood conditions and viewed as a means of ascertaining livelihood security when economic circumstances are improving (Niehof 2004). The design of intervention hinged on the SLA[23] framework, enables the institutions to provide financial resources such as microfinance effectively, supporting individuals by improving access to social services and entitlements, while strengthening their household asset profile.

[23] The potential merits of a practical application of the SLA framework would be its people-centred outlook and its primacy on sustainable rural poverty reduction.

The connection between microfinance and the SLA framework helps to examine how MFIs design and implement financial products that help to manage, adapt and mitigate livelihood shocks. It is believed that when MFIs design products to reflect the needs of their clients in the context of SLA, there is a potential for the improved livelihoods and strengthening of households and ensuring capital formation (Bote et al. 2014; Mago 2014). A vital strength of the SLA is its reliance on bottom-up and participatory approaches in accessing and analysing critical information for the design and implementation of projects.

In the context of adopting SLA to microfinance, it is essential to note that: “livelihoods rarely refer to a single activity. It includes complex, contextual, diverse and dynamic strategies developed by households to meet their needs” (Jops et al. 2016). Most households are usually compelled to use different strategies to manage their livelihood or household shocks. In most instances, these coping strategies have negative consequences for either household food security or their ability to build up savings for investments. An increased understanding of how households manage their shocks could help MFIs design financial products to support their clients to mitigate and cope with livelihoods while maintaining household resilience.

4.1.2 M4P approach

The introduction of the M4P[24] approach in recent times has been applied in development work by different agencies. Notably, the UK Department for International Development (DFID) have used it to develop an understanding of the market systems development for the poor (Blaser 2014). According to the DFID (2008): “It is an approach to developing markets systems so that they function more efficiently, sustainably and beneficially for poor people, building their capabilities and offering them the opportunity to enhance their lives” (SDC/DFID, 2008: 25). In effect, the central objective of an M4P approach to poverty reduction is to understand the constraints or challenges that impede the development of financial market systems for the poor.

[24] Making Markets Work for the Poor

Tschumi and Hagan (2008b) summarise that there are essential dual features that provide the underlying justification for the M4P framework. The first feature that inspires the design of the M4P approach acknowledges the perceived reality of people living below the bottom of the pyramid (BOP) in market systems, and the importance to recognise and influence those systems. The second underlying feature that defines the essence of the M4P approach is its conceptual background that recognises changes in economic thinking concerning the poor. Indeed, these two features have introduced some innovative insights and dimensions into the significance and effective functioning of market systems and its interconnectedness with the poor – taking into consideration the critical implications for institutions, agencies and governments, influencing their actions and policies.

4.1.2.1 Market systems and the poor

Markets matter for everyone. However, for people living in the BOP – often with less strong informal networks coupled with links to government patronage – markets are particularly essential in poverty reduction (Prahalad 2006; Prahalad 2012). Efficient markets are an effective and direct means of facilitating the participation of people in economic enterprises – as producers (farmers, business owners), as employees (service providers such as labour) and as consumers of finished products and services (Tschumi and Hagan 2008b).

Inclusive markets tend to offer the poor the things they need to sustain their livelihoods – jobs and other opportunities, goods and services – to increase their incomes. The poor are usually left with limited options to benefit from growth in situations where markets work inefficiently. The approach emphasises identifying and addressing fundamental causes (rather than symptoms) of poor market performance with the view to enable large-scale systematic change. Although the nature of the M4P[25] interventions may be minor it should strive to consistently leverage the actions of critical market players to facilitate widespread and sustainable systemic change (Porteous 2004; Tschumi and Hagan 2008b).

[25] The M4P approach focuses on developing market systems, with specific consideration to the different functions and players (public and private institutions, formal and informal networks).

Applicability of the M4P approach to microfinance

The application of the M4P approach is to augment the SLA to adequately address the research problem – concerned with the designing of microfinance products that reflect the needs of the poor. The use of the M4P approach helps the researcher to assess how microfinance services can be designed to work effectively for the poor. The study argues that, by facilitating change in the daily operations of market systems that support people's livelihoods activities, it is feasible to effect substantial and sustainable change in livelihood outcomes.

There are several obstacles in the processes and structures that impede the ability of MFIs to provide services to poor clients. Consequently, by removing these obstacles through market system changes, microfinance could be effective for poverty reduction. Market system changes can occur through a comprehensive understanding of all players in the system. Learning from the lived experiences of the poor and logically analysing the heterogeneity of their needs in the community could help institutions provide customised services to the poor.

4.1.2.2 Key players in the market system

The M4P market system comprises three essential functions and players: the core function, a set of rules, and the supporting functions. It is aimed that a well-developed market system will be an enabler for transactions of a good or services between producers and consumers. Below, we discuss the functions of the market system and highlight their level of interconnectedness and how they are applied for this research.

4.1.2.2.1 Core function

The core function in an M4P market system facilitates the exchanges between providers (the supply-side) and consumers (demand-side) of goods and services. The exchanges are traditionally facilitated by money, however, it is possible to do this through non-financial accountability, for example, in the case of government-provided public goods or through informal *quid pro quo* arrangements through social networks. In most market systems, the private sector can be seen to be the leading provider (Tschumi and Hagan 2008b).

In the context of this study, the core function examines the relationship between clients and MFIs regarding the design and implementation of products and services for poverty reduction. This aspect of the analysis aims to examine the various demand and supply constraints in the microfinance market with the view to sustainably reducing poverty. On the demand side, the study works to analyse the obstacles clients of MFIs face in accessing financial tools and necessary improvements to the current design of products needed to make the microfinance market work effectively for the poor. Indeed, the study recognises that some of the systemic changes that need to be made in the market system may not be within the remit of the core market, but from other complementary institutions in the supporting function.

For example, clients may not necessarily require MFIs to address livelihood shocks such as the death of livestock directly, but instead would need the services of the veterinary extension officers. However, clients of MFIs may also directly need financial resources to enable them to pay for veterinary services rendered in this context; thus, highlighting the various layers of interconnectedness. In all these, it is vital to underscore the existential need for continuous information and knowledge sharing, and learning from the lived experiences of both the demand and supply side of the core market.

4.1.2.2.2 Rules and regulations

Rules are particularly important as they define the framework of operations among the principal actors in the core market. They shape the dynamics and outcomes of the market and govern involvement and behaviour in market systems. The rules-of-the-game cover both informal rules and norms, and as well as formal rules or laws and other codes of ethics in the marketplace.

Generally, the government and its allied agencies are commonly the custodians of formal rules and standards governing the operations of organisations. In the context of the microfinance and, more broadly, local development finance institutions (rural banks, credit unions), the Central Bank and its allied bodies stipulate the rules of engagement of actors. The effectiveness of the market systems, to a more considerable extent, depends on the enforcement of rules; this, in many a case, has proven to be problematic, thereby undermining the efficiency of the market. For example, laxity in the regulation of deposit collection institutions may well result in the unproductive and sometimes unethical use of depositors' funds. The study aims to examine from both demand and supply sides how formal and informal rules can make microfinance work effectively for the poor.

4.1.2.3 Supporting functions

In a typical M4P approach, a set of other functions support the activities of the core market to facilitate exchanges and to enable the market to develop and grow inclusively (Thorpe et al. 2017). For example, in order to supplement the activities between clients and MFIs, the core market may require some support from private sector players, governments and informal networks. The supporting function may range from the government – providing infrastructure, coordination, research & development and information. Also, private sector actors – skills and capacity and other related services. For example, most clients reported they required government intervention to provide jobs and infrastructural development – road networks, schools, clinics and market centres to augment the services they currently receive from MFIs.

Tschumi and Hagan (2008b) contend that the nature of the supporting functions and the institutions that provide them differ from that context to another. In the case of employment (labour markets), for instance, it may require the government to provide available information on market trends, job opportunities, available skills levels and the legal framework. Moreover, the private sector may also adequately provide the necessary skills and capacity training to people supported by some allied agencies of government.

Additionally, coordination of the activities in the core market is always likely to involve both government and the private sector. Clearly, in most jurisdictions, the government and its allied agencies intervene to bring about substantial changes in the market system by providing the necessary supporting functions and aid with the rules.

In summary, the analytical framework adopted for the study seeks to help analyse the interactions between the clients and MFIs, with the view to assessing the required supporting functions to create market-friendly microfinance for poverty reduction. The framework acknowledges that microfinance alone is inadequate to reduce poverty, but needs to be accompanied by other services to ensure the necessary ‘trickle-up’ instead of ‘trickle-down’ for the poorest of the poor[26].

4.2 Research philosophy: pragmatism

The study adopted a pragmatist approach as a research philosophy that applied both quantitative and qualitative methods of research to support the collection and analysis of data. The pragmatist worldview was deemed applicable for this study because it mirrored the research strategy of applying a hybrid of different research methods and analytical approaches to iteratively construct knowledge (Creswell 1994b; Tashakkori and Teddlie 2010; Teddlie and Tashakkori 2012; Creswell and Creswell 2017).

The pragmatist’s worldview takes its origin from the works of Peirce, James and Dewey (Cherryholmes 1992). The pragmatist worldview is driven from actions, situations and their consequences rather than the antecedent conditions. As a philosophical worldview suitable for application in mixed-methods researches, it is viewed to be mainly concerned with addressing the research problem by applying pluralistic approaches to generate knowledge about the problem (Patton 1990; Morgan 2007; Tashakkori and Teddlie 2010).

The pragmatist contends that the rationalisation of a belief system largely depends on the success with which they believe it can be practical in ‘real world’ situations (Yvonne Feilzer 2010). As a case in point, concepts and models that underpin a theory are considered to be true when they appear to give practical explanations to observations about a phenomenon effectively (Morgan 2007b). In this regard, if a particular theory were unable to adequately explain, or envisage what is observed in research, then such theory would be implausible to be recognised as ‘true’ reflection of knowledge. Robson (2002) postulates the means to gain knowledge are thus inconsequential than the

[26] The study posits that improving the ‘trickle-up’ for the poorest through inclusive microfinance means that the poor are the focal point of the product design processes to enable them to participate in the market.

ability to apply it effectively, and methods employed in a study can consequently span those traditionally located only within a positivist or constructivist worldview. Pragmatism, as a worldview, is viewed as the philosophical underpinnings for several mixed-methods types of research.

The application of a pragmatist worldview is not linked to only one philosophical system of reality. This philosophy applies well with the mixed-methods studies that permit researchers to draw from quantitative and qualitative approaches in research liberally. Drawing from the works of Creswell, “for the mixed methods researcher, pragmatism opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis” (Creswell 2013b: 11). Pragmatists agree that individual researchers are entitled to the freedom of choice of research methods as well as the procedures in these methods and the techniques that adequately satisfy the research purpose.

The pragmatic worldview adequately supports the methodological stance of this study, which adopted a convergent parallel mixed-methods research design. This research’s worldview is consistent with Cherryholmes (1992), who postulates that: the external world is free of the individual’s mindset and at the same time embedded in the mind. Indeed, there is no one ‘reality’ in the world; as such, there is a need for researchers to eschew posing questions on reality and laws of nature.

4.3 Methodological approach

This section of the chapter delves into the research strategy and design used in the process of data collection and analysis. The section sheds light on the mixed-methods approach and the reasons for its adoption in the study.

4.3.1 Mixed methods

The mixed-methods approach is essential to comprehend social interactions and reality, however, it is still undergoing some development in form and content, which suggests that its practical integration in empirical studies remains subtle (Hentschel 1999; Bamberger 2000; Creswell et al. 2003).

Nevertheless, it is critical to gain a deeper understanding of the mixed-methods approach, particularly in the context of when and how both quantitative and qualitative techniques are likely to be integrated. The use of the mixed-methods approach, for example, raises a question: does integration suggest undertaking separate qualitative and quantitative studies and comparing results?

Following the increasing use of mixed methods, investigators have sought to explain and define the approach, and the necessity in distinguishing mixed methods from paradigms previously applied have been emphasised (Greene et al. 1989). In general, studies hinged on mixed methods are defined as embracing research that covers at least both qualitative and quantitative methods (Greene et al. 1989; Johnson and Onwuegbuzie 2004; Small 2011). Nevertheless, whereas some perspectives support this definition of mixed-methods research, it is also further highlighted that such descriptions are not devoid of inconsistencies in meaning (Tashakkori and Teddlie 2010).

Some of the earlier definitions of mixed-methods studies are inclined to tag such researches as a mere application of both quantitative and qualitative paradigms in the context of a single study. Lately, though, the combination of data from both paradigms to produce a more comprehensive understanding of a societal dilemma or phenomena has emerged and gained traction in meaning (Doyle et al. 2009). The mixed-methods approach has the tendencies to produce a more precise and more in-depth understanding of a subject matter, by adding words and picture evidence to support numbers and vice versa, providing a better capacity to capture the complexity of the lived experience of people (Doyle et al. 2009).

From the above discussions, it is noted that the combination of approaches leads to the formation of new knowledge, inaccessible through traditional approaches alone (Creswell and Plano-Clark 2011). The work of Creswell et al. (2011) points out four broad processes and two advanced mixed-methods strategies of undertaking studies from a mixed-methods perspective: the convergent parallel[27], explanatory sequential, exploratory sequential and embedded designs.

[27] The study applies a convergent parallel mixed-methods approach and is discussed in detail later in the chapter.

The work of Creswell et al. (2011) develops a typology of mixed-methods designs as summarised below:

Table 4.1 Mixed-methods designs

Design	Key features
Convergent parallel	Simultaneous independent data collection and analysis. Results merged to provide a complete understanding of a phenomenon.
Explanatory sequential[28]	Strands occur in turn, with initial quantitative results explained in more detail through qualitative enquiry.
Exploratory sequential	Methods carried out sequentially, with the qualitative phase first. The quantitative method then seeks to test and further quantify initial qualitative findings.
Embedded	An additional strand of research is added to a more extensive study to gather supplemental information about this design. It involves the application of both convergent and sequential data.
Transformative	This design applies a theoretical lens from the field of social justice or power and the general perspective that contains data from both quantitative and qualitative methods.
Multiphase	This design is commonly used in the field of evaluation of programme interventions and applies either concurrent or sequential strategies together to shed more light on long-term goals of intervention.

Source: Creswell et al. (2011)

Bamberger (2000) posits that research designs can combine both quantitative and qualitative paradigms at various levels of the research process. Nevertheless, approaches that seek to completely integrate qualitative and quantitative procedures at all phases of the research enterprise have often proved problematic. Bamberger's opinion suggests that mixed methods can be mixed at various stages of the research process, including sample selection, data collection, data analysis and discussion of the research findings.

In addressing the individual strengths of components of the mixed-methods approach, qualitative studies seek to gain an enhanced and detailed understanding of sociocultural, economic and political phenomena that underpin development interventions (Bamberger 2000). The work of Madey (1982)

[28] The explanatory sequential mixed-methods approach is adopted when the investigator begins with a quantitative research, and the outcome of the analyses feeds into the qualitative research. The term explanatory is given to this type of research because the initial quantitative data is explained in detail with the qualitative data.

postulates that the use of the mixed-methods approach in investigations has synergistic effects on the various research processes of design, the collection of data and analysis to reveal knowledge.

There is growing attention and traction in the application of mixed-methods research paradigms in the field of development research. This new attention is partly owed to the ultimate realisation that no single research approach to data collection and analysis is devoid of inherent challenges and biases. As such, the integration of approaches helps to potentially address the weakness in either qualitative or quantitative methods and subsequently complements each other (Creswell et al. 2003).

Additionally, the merit of mixed-methods research resonates with its potential to address a myriad of research questions, given the fact that the investigator is not limited to only one approach of research examination. In every research enterprise, it is vital for a researcher’s choice of study design to be informed firmly by the type of research probes and questions it seeks to address (Doyle et al. 2009; Creswell et al. 2011), as the application of different methods has the potential of addressing different questions and objectives adequately (Bryman 2006). For example, in the context of this study, the use of qualitative approaches helped to shape the researcher’s level of understanding on the poverty dynamics, livelihood strategies and vulnerabilities of respondents with a view to identifying the apt microfinance products that reflect their poverty context.

The quantitative approach helps to measure the effect of microfinance interventions or products on the livelihoods of their clients, to identify tools that work effectively for the poor. Nevertheless, throughout this research process, the approaches have been applied in parallel to reveal the knowledge needed to address the research questions.

4.3.1.1 Mixed-methods design: convergent parallel mixed methods

Research design represents an essential component of conducting any study or survey; it defines the structure and methods to be deployed in the research enterprise. It ensures that data and other evidence collected for a study address the research questions adequately. According to Yin (1989: 29), research designs “deals with a logical problem and not a logistical problem”. In this respect, the relevant issues that relate to the methodological suitability are embedded in the sampling design and data collection techniques, as well as the methods of data analysis.

The work of Bryman (2015: 40) puts this into more perspective: “a research design provides a framework for the collection and analysis of data: a choice of research design reflects decisions about the priority being given to a range of dimensions of the research process”. In effect, research design fundamentally attempts to establish the causal relationships that exist between the variables being studied and further identify the individuals to be investigated.

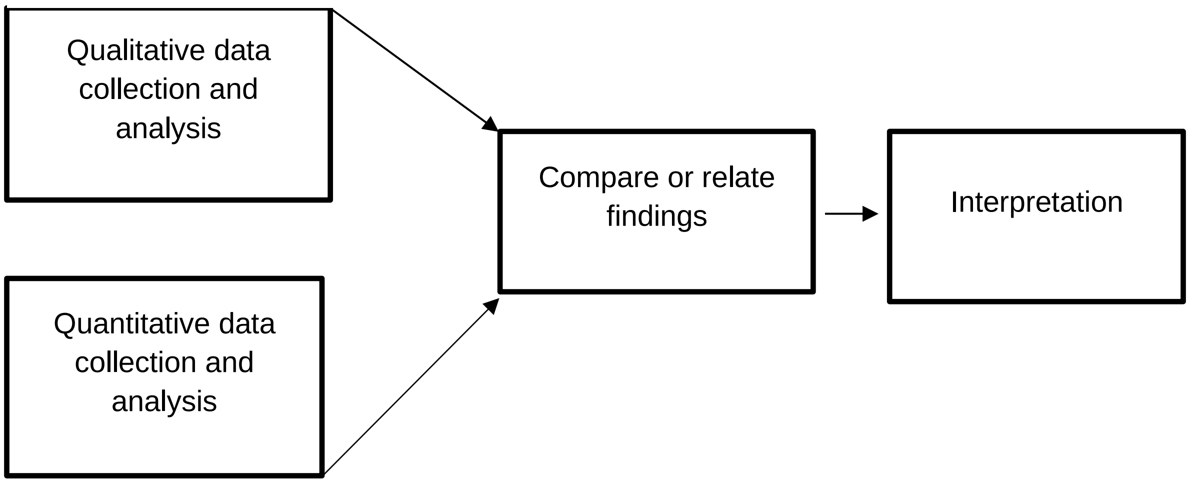
The choice of the type of mixed-methods designs to employ in a study depends on the nature of the study and the variables that need to be examined. Studies that require the integration of both qualitative and quantitative data would, therefore, require the researcher to determine whether to explore the former before the latter or simultaneously.

The most common use of mixed-methods research reported in the literature is triangulation (Bryman 2006). This term has covered many meanings since its inception to the extent that it has become regarded by some as a meaningless label (Bryman 2006). In simultaneous triangulation, data from both methods is collected during the same time point, and findings only integrated during the analysis phase. This design is labelled by Creswell and Plano-Clark (2011) as convergent parallel (see figure 4.1). The simultaneous use of two methods in this way may be used to obtain different but complementary data on the same topic (Morse 1991). If findings converge, this may increase confidence in these and has been labelled ‘multi-method confirmation’ (Small 2011).

This study, therefore, adopted a convergent parallel mixed-methods design, as it was deemed appropriate to facilitate the triangulation of both qualitative and quantitative data effectively. The convergent parallel mixed-methods design enabled the researcher to typically collect both qualitative and quantitative data types simultaneously, and integrate the information gathered in the interpretation process of the findings.

According to (Creswell 2013a); Creswell and Creswell (2017), the use of this research design enables the investigator to effectively address contradictions and other incongruent findings by seeking a further and more in-depth explanation from respondents. The simultaneous collection of both qualitative and quantitative data from the field also allowed for time-saving, since the researcher did not need to pay several visits to the field to collect the different forms of data for the research.

Figure 4.1 Convergent parallel design



Source: Creswell et al. (2011)

4.4 Sampling design and procedures

Sampling, according to (Varkevisser et al. 2003), "is the process of selecting some study units from a defined study population" (p. 195). In various studies, different sampling designs or techniques are deployed depending on the nature of the research and the population structure. Notably, simple random, proportional, multi-stage and cluster sampling.

This study also deployed a multi-stage sampling strategy in selecting respondents from various communities. This sampling technique is mostly deployed in community-based studies, where respondents are selected for interview from different clusters, and the clusters need to be selected from different areas (Varkevisser et al. 2003). The sampling of the respondents for the study was done in two segments. The first segment had to do with the selection of respondents for the survey (quantitative), and the second segment involved the selection of participants for interviews (qualitative).

The study ensured that both qualitative and quantitative sampling was undertaken separately, but data collection for both was done in parallel, consistent with the convergent parallel mixed-methods approach. A purposive sampling method was employed to select participants for interviews and focus group discussions (FGDs), while participants for the survey were randomly selected from a cluster list of MFIs' clients. Selecting participants for FGDs was done by identifying them during the survey and interview stages of the research, with well-informed individuals purposively selected to participate in the process. It is essential to add that FGDs were undertaken later in the data collection process, although participants were either selected during the interview or survey stage.

4.4.1 Survey sample size

A vital stage of the research process pertains to the determination of the sample size for a survey. Indeed, this is equally a critical consideration in the field of microfinance research since the sample size can help inform the reliability and validity of the findings. In most cases, as indicated by the CGAP, the sample size for a survey is determined by time and the availability of resources.

However, technically, the sample size for a survey is also informed by the following four underlining factors: (i) the need for precision in the survey findings; (ii) the probability distribution of the research variables that need to be measured across the population of interest; (iii) choice of sampling design; and lastly (iv) the number of variables the study intends to consider (Henry 2003).

However, for this study, different sample sizes were allotted to various MFIs being studied, due to the relative heterogeneity of the population structure evident in the three different MFIs (SAT, CCU and SRB). The researcher's initial strategy was to deploy the Consultative Group to Assist the Poor[29] (CGAP)

[29] The CGAP rule-of-thumb for determining sample sizes for microfinance surveys recommends a minimum sample size of 500 respondents and further recommends a 2–3 ratio distribution for surveys involving clients and non-clients respectively – 200 clients and 300 non-clients (Henry 2003).

approach to selecting sample sizes for conducting microfinance studies. This is because the original scope of the research covered both clients and non-clients of MFIs, but this had to be altered due to some unanticipated challenges in identifying non-client participants.

A different target population for the various institutions was established to enable the determination of the sample size. The target population was based on the number of active microfinance clients that currently receive one service or another from the MFIs. Based on available information on the various microfinance clientele bases, the researcher rested on a target population of (N) 600, 1,500 and 2,000 for SAT, CCU and SRB respectively. Besides the target population, other considerations are usually made in the determination of the sample size (n), such as the confidence level for the study; the scale variability mainly within the population of interest; and lastly the margin of error set by the researcher for the study (Yeboah 2007).

In most social science studies, the confidence levels are set at 5% or 1%, however, Bartlett et al. (2001) argue for a 5% margin of error for a categorical data set. According to Israel (2009), the general principle and strategy for calculating sample sizes for studies in the social sciences are given as:

$$\mathrm{n} = \frac{\mathrm{N}}{[1+\mathrm{N}\,(\mathrm{e})^2\,]}$$

Where:

$\mathrm{n} = \text{Sample size}$

$\mathrm{N} = \text{target population}$

$\mathrm{e} = \text{error term or alpha level}$

For example, the sample size for the SAT was determined as follows:

$\mathbf{n} = \frac{\mathbf{600}}{[\mathbf{1+600\,(0.05)^2}\,]}$ **=** $\mathbf{n = 240}$ clients of SAT.

Following the same procedure, the study arrived at 240, 315 and 333 sample sizes for SAT, CCU and SRB clients respectively. However, notwithstanding the above sample size calculations and due to constraints such as lack of time and financial resources, the researcher decided on the following sample sizes for the study: 28, 42 and 50, representing SAT, CCU and SRB respectively. As such, the total sample size considered for the study was fixed at 120 clients.

However, the final sample sizes were not representative of the population of the municipality and total active microfinance clients of the various MFIs to allow for possible generalisation of the findings to other jurisdictions in Ghana. The study presents views and perceptions of clients relating to how reflective microfinance products are to their livelihood strategies and vulnerabilities in the Jirapa municipality. Nevertheless, the findings of the research have the potential to serve as a basis for scaling up similar and extensive studies in other jurisdictions to follow the methodology used in this research.

4.4.2 Sampling of communities and gender

The study also established a sampling technique for various communities and gender. In total, about six communities/villages[30] were purposively selected. These communities included in this study comprised of localities where the various MFIs had active operations, either in the form of an agency office or covered by their network of mobile bankers. These communities included: Jirapa central, Tizza/Boo, Gbare, Hain, Ping and Chaperu, and were subsequently recategorised into rural and urban for the analytical purposes of this study.

The inclusion or exclusion of a community from the urban and rural categorisation was done using the distance of the community from the municipal capital (Jirapa central) as a reference indicator. Communities that were more than 5km away from Jirapa central were considered rural. Indeed, it is essential to note that such communities that were considered rural had some homogeneity in infrastructural deficits. For example, they all had untarred and sometimes impassable roads, a poor or dilapidated market square, and inadequate health care facilities. It is therefore interesting to note that most respondents indicated in the study that they needed government interventions in providing one or more of these facilities, to augment microfinance financial services.

[30] See figure 2 of appendix 4 for the map depicting the study area including selected communities surveyed.

The outcome of the categorisation saw Jirapa central and Tizza/Boo making up the urban cluster, while the remaining communities were categorised as rural due to the criteria. Further to this, out of the total sample of 120 respondents, about 53 participants (44.2%) and 67 participants (55.8%) represented urban and rural, respectively. The motive for the categorisation was to reveal the differences in lived experiences among the various clients and ascertain whether microfinance products and services reflected the differences in livelihoods and poverty dynamics across urban and rural populations.

Theoretically, it has been argued that microfinance institutions have increasingly designed products and services to meet the needs of their urban clients, with little attention given to their rural clients (Meyer 2002). Even when MFIs provided services in rural communities, the products and services are sometimes not in congruence with the local needs of the rural poor (Montgomery and Weiss 2005b). The selection was mainly based on communities with either an agency office of any of the various MFIs or with active members patronising the financial services provided by the institutions under review.

Gender was another element of interest in the sampling process; this is because of the increasing importance of gender analysis and mainstreaming in poverty reduction initiatives. The study was particularly interested in exploring the gender dynamics that are mirrored in microfinance products, and the extent to which the needs of women are mainstreamed. The researcher was poised to learn and analyse the perspectives and lived experiences of women in a local patriarchal system, and understand how they are affected by microfinance products.

Another reason for the researcher's immense interest in understanding the gender perspectives in this study relates to the fact that women and children were found to be worse affected by poverty relative to males in the Jirapa municipality. Furthermore, the municipality during the last PHC had the female population at 53% compared with 47% males (GSS 2012; GSS 2014).

In effect, determining a representative sample that reflects the gender dynamics in the population structure is essential. The study concluded on the following samples: 58 (48.3%) and 62 (51.7%) of males and female participants, respectively. The study believed that such a sample allocation was representative of the population structure of the study.

4.4.3 Rationale for selecting Jirapa municipality

The target population that was considered by the researcher in this study is in the northern part of Ghana. This part of Ghana covers three regional divisions that include: Upper West, Upper East and Northern Regions. Two additional regions have recently been carved out of the Northern Region, following a landslide referendum in 2018.

However, due to logistical constraints and the large size of the study area, this study was unable to cover all three regions in Northern Ghana; hence, the Jirapa municipality in the Upper West Region was chosen for this study. The recent headcount poverty ratio in Ghana places the three northern regions as the highest in terms of poverty; the GSS (2015) reports the following incidence of poverty in the Upper West[31] as 92.4%, Upper East as 84.4% and the Northern Region as 84.2%.

The statistics make Northern Ghana and particularly the Upper West Region[32] the most poverty-endemic part of the country, therefore justifying the choice of location for this study. Consistent with the justification for the choice of study location, GSS (2015: xi) says that: “To reduce poverty in Ghana, households in the most affected districts in the Volta, Brong-Ahafo, Northern, Upper West and Upper East Regions must be targeted for social intervention programs. Special studies also need to be undertaken to clarify the causes of poverty in the country”. According to the 2010 PHC, the total population of the Upper West Region stands at 702,110; representing a male population of 341,182 and female 360,928. The region also has 110,175 households recorded during the 2010 census. Because this study will be carried out using household data, the target population for the study will be 110,175 households (GSS 2013b).

[31] The GSS statistics suggest that the Upper West Region has the highest amount of headcount poverty in Ghana.
[32] Because of the context of poverty in Ghana and its severity in the three northern regions, this research was done in the Upper West Region. The selected region is the poorest (with incidence of poverty of 92.4%) among the three northern regions.

The choice of the Upper West Region is also influenced by the fact that the researcher is adequately placed in the Upper West in terms of knowledge of the local demographic dynamics, livelihood strategies and activities, as well as highly proficient in all the local languages[33] spoken in the region. The importance of these aforementioned local dynamics cannot be overemphasised. The study's choice of Jirapa municipality for this study was also significantly inspired by the current landscape of financial institutions in that location.

As at the time of the fieldwork, Jirapa[34] had no mainstream banks operating, except GN Bank, which was later downgraded to an S&L company, following the reforms in the banking sector in 2018 by the BOG. As such, choosing Jirapa for this study was ideal in order to understand how locally based, and non-bank financial institutions design their products and services for poverty reduction.

4.5 Data collection procedures

An essential stage of every research enterprise is the processes involved in data collection for empirically examining any phenomenon. The data collection procedures stipulate how data or information is collected, the format of collection and the tools to be used. Since this study applies a convergent parallel mixed-methods design, the procedures in the data collection were modelled to be consistent with the design.

Kertzer et al. (1997) suggest that the combination of methods at the data collection stage is essential, giving the increasing recognition of the limitations of the survey method for collecting data that is precise and adequately integrated at several echelons of social reality. The study was guided by the identified mixed-methods approach as it was viewed as the most practical at the data collection stage. The mixed-methods approach takes into cognisance contextual data gathered through qualitative data collection tools, neatly merged with a quantitative data collection mechanism (Hentschel 1999; Bamberger 2000). Because of the relative strength of the mixed-methods approach, as

[33] The researcher's proficiency in all local languages spoken in the study area allowed communication with respondents, that helped to reduce missing information or content losses due to translation and interpretation.
[34] The study currently has four operational financial institutions, namely: Sonzele Rural Bank, Sinapi Aba Trust, St Joseph's Cooperative Credit Union and GN Savings and Loans company, providing various products to clients.

discussed previously, both quantitative and qualitative data were collected at the same time. This procedure allowed the researcher to identify critical issues and trends emerging from either the qualitative or quantitative strands that needed more clarity. Most importantly, this data collection process was convenient in identifying key informants for either interviews or FGDs.

It is important to mention that, in development research and programme evaluations, quantitative approaches can influence the collection of qualitative data and the reverse. For example, the questionnaire for this study included some open-ended questions that elicited subjective responses from respondents. Such open-ended responses were used as a basis for some qualitative analysis in this study. Also, it is not uncommon for quantitative data to be derived from qualitative approaches of data collection, particularly when probability sampling methods have been applied in the selection of respondents (Rao and Woolcock 2003). Ultimately, the potential of the data collection procedures deployed in this mixed-methods study ensured that both qualitative and quantitative data methods were complementary and provided a platform for verifying data reliability (triangulation).

The researcher's ability to carefully identify and phrase key questions consistent with phenomena being studied was considered central in this study. As such, the study ensured that questions in both qualitative and quantitative data collection tools were reflective of the various thematic areas of interest. In effect, the questionnaire, interview format and the guide for FGDs were consistent with the analytical framework of the study. Following this line of inquiry, both quantitative and qualitative data gathered covered contextual issues of poverty and the design of microfinance products congruent with SLA and M4P frameworks.

4.5.1 Construction survey instruments: questionnaire and interview guide

Both the questionnaire and interview guide were constructed during the fieldwork, and the design was influenced by the preliminary analysis of the pilot study. The research ensured that the questionnaire was reflective of the context of all three institutions being studied. As such, the same questionnaire was used for SAT, CCU and SRB clients. In doing this, the researcher carefully considered the competing themes evident in the research objectives and questions and sought to carve out a well-structured questionnaire to elicit valid and reliable information from respondents. A well-designed data collection tool helps to conduct proper analysis and interpretation of the responses (Bell 1999; Creswell 1999).

The study also believes that one effective way of safeguarding the data reliability and validity was to ensure that the data collection tools were appropriately designed with limited constraints. In this direction, the research validity was viewed from the perspective of the ability of the instruments to adequately measure the competing concepts in their actual contexts. Data reliability in research pertains to the replicability of the research measuring tools to produce similar results over time. In summary, both the questionnaire and interview guide were constructed with a keen eye on validity and reliability. Validity in research is about the level of accuracy of research instruments, and reliability is concerned with the consistency and stability over some time.

The questionnaire was partitioned into several components that included the following: demography (biographical information such as age, sex, occupation, ethnicity, education, religion, marital status, residential status, region of origin). The following components were concerned with business activities, poverty context of households, livelihoods of respondents and market access, including labour and migration. Other components covered in the questionnaire were: MPI of respondents, effects of microfinance on clients' household and business outcomes.

The questionnaire was also constructed to elicit data from the respondents on their perceptions of microfinance credit and savings product design (minimalist approach), access to other non-financial services and poverty targeting of microfinance products. The questionnaires sought to gather the perceptions of clients' regarding the implementation strategies or channels of their respective MFIs. However, in making microfinance work for the poor, the questionnaire delved into the following: government policy and social protection, and other interventions needed in the core microfinance market to make services accessible to the poor.

The design of the question and interview were guided by the researcher's analytical framework, extensive literature review and the researcher's in-depth knowledge of the local dynamics of the research area. While the questionnaire generally appeared lengthy, it was considered adequate to elicit all relevant information from the respondent in order to avert the situation where the researcher would have to make several follow-up visits to the field. Nevertheless, each research assistant spent a maximum of 30 minutes to complete the questionnaire with each respondent.

The design of the interview guide followed a similar pattern but was limited mainly to major themes consistent with the research objectives. Interview questions were mostly open-ended in nature and allowed more room for subjective responses from respondents. When interview discussions with interviewees had reached a saturation point, subsequent questions were slightly amended to explore other emerging trends from the discussions.

The questionnaire comprised of both close-ended and open-ended questions, with the interview guide being mostly constituted by open-ended questions. The close-ended questions allowed for the specific measurement of the perceptions of clients across a defined range of options, while open-ended questions were essential to encourage respondents to include issues they wanted to talk about that were either mentioned in the questionnaire or relevant to the general theme of the thesis.

4.5.2 Pre-testing/piloting of study

The study conducted a pilot study to test the suitability of the research instruments with the view to addressing issues of ambiguities in both the questionnaire and interview guide. According to Oppenheim (1992), the questions posed in the questionnaires and other data collection instruments are not without problems and may sometimes be misunderstood by the respondents due to the way and manner in which questions are constructed.

Creswell (1994a); Robson (2002) postulate that piloting a study enables the research to unravel some challenges with the design of the data collection tools, thereby enhancing the suitability of the research instrument for use. In line with this, the researcher carried out a pre-test of the study in the Sissala East capital of Tumu. The pilot study lasted for one week, and the researcher administered the questionnaire to 25 clients and interviewed ten (10) of the Sissala Area rural bank and the Cooperative Credit Union of Tumu.

Notwithstanding the above arguments in support of pre-testing, it does come with some implications for internal validity, mainly when the pre-testing is conducted in the same study area as the main study. When pre-testing is conducted in the same study area as the main study, respondents tend to have clues to the questions leading to bias in the responses from the research instrument (Slack and Draugalis 2001).

The researcher conducted the pilot study in Tumu as a strategy for dealing with the challenge of internal validity that could emanate if the pre-testing were carried out in Jirapa (the actual study area). Some deficiencies in the questionnaire became evident during the pilot, and considerable changes were made. For instance, the researcher discovered that some of the questions were unnecessary and others were difficult to translate into the local language; hence, there was a need to make changes to terminologies that could be translated into the local vocabulary.

The pilot study also helped flag some issues with the questions about the indicators on the MPI of respondents' households. For example, it emerged that getting data for some indicators (nutritional information[35] of adult/child in the household) in the MPI was challenging to access, and therefore needed to be replaced with an accessible indicator[36]. In summary, pre-testing enabled the researcher to become more conversant with the questionnaire and interview guide, and also ensured some level of consistency in the translation of certain concepts or terms into the local language.

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[35] Getting such information requires access to household members' health and nutritional records, which was clearly difficult due to the lack of accurate documentation.
[36] The study decided to replace the indicator on 'nutrition' with 'access to health insurance'.

4.5.3 Negotiating entry into the field

The ethics process also involved the negotiation of entry into the field – gaining access to the various institutions and local opinion leaders in the respective communities being studied. Following best practices, the researcher applied for permission to access the three institutions involved in the study. This process involved the researcher arranging an initial informal meeting with various institutions, to establish their respective internal protocols regarding the involvement of external parties in studies of this nature. As per the request of the various institutions, the researcher furnished management with the following: expression of research intent, letter of introduction from the University of Bradford, official consent form and the research proposal together with a work plan.

In the case of SAT, official approval could not be given from the branch office in Jirapa municipality, given the centralised nature of their operations. As such, permission was sought from the head office in Kumasi. Regarding CCU and SRB, both local institutions' approval for the study was given by their respective governing boards and communicated to the researcher verbally through the managing directors. This milestone paved the way for the commencement of fieldwork in March 2017 and ended in June 2018.

It is important to emphasise that, once the permission had been given for the study, the staff of the institutions were supportive in accessing the various potential participants. The staff provided a list of potential participants across all their microfinance operational programme areas. A key informant was also made available, mostly a leader of the solidarity or joint-liability groups. These group leaders played a significant role in further negotiating access to the randomly selected participants of the survey. According to Robson (2002), negotiating access to research, respondents should be an ongoing process rather than an event. Key informants were helpful in continuous negotiation with prospective respondents to participate in the exercise.

The process of negotiating access with respondents was particularly Herculean because the researcher had brief discussions with each prospective respondent to explain the purpose of the study. The process was necessary in establishing both the credibility and authority of the researcher, and also to begin to bond with would-be participants. The process also enabled the researcher to share his knowledge about the community and give reasons for selecting the specific locality for the study. Indeed, this strategy of knowledge sharing is consistent with the suggestion by Lofland and Lofland (1984) that researchers need to exhibit that they have some considerable knowledge about the research area to signal their level of competency to carry out the study.

4.5.4 Questionnaire administration

The questionnaire was administered to 120 respondents from the three institutions being studied. The distribution of the questionnaire was as follows: SAT=28; CCU=42 and SRB=50 respondents. The questionnaire was administered to both rural and urban respondents, with the view to eliciting the knowledge and lived experiences of clients across the localities being studied. The communities involved in the administration of the questionnaire were: Jirapa central, Gbare, Ping, Hain, Chaperu and Tizza/Boo.

Owing to the length of the questionnaire and the sparse nature of the respondents in all the communities, research assistants were recruited to help in the data collection. All the research assistants had adequate knowledge of the local dynamics of the research area and were all university graduates from the University for Development Studies (UDS), Wa Campus.

The research assistants were given honorarium to compensate for their time. The survey stage of the research started immediately after ethics approval from the University of Bradford Ethics Committee and was followed by a pilot study and the subsequent amendments of the questionnaire. Because most of the respondents were engaged in farming and other agricultural activities, the survey time coincided with the dry season era where there were limited or no farming activities, so respondents were available to partake in the study.

4.5.5 Interviews

The interviews were administered to both clients and staff of the MFIs, the staff of the microfinance administrative division of the Bank of Ghana and staff of the

Ghana Microfinance Network and other stakeholders that matter in policy and regulation of the microfinance sector in Ghana.

The study carried out 20 in-depth interviews. The in-depth interviews were in two strands – the first strand was with the clients of MFIs and the second with staff from the relevant institutions. Selection of interviewees for the former was based on the responses given by a respondent in the questionnaire, and respondents that were deemed to have more in-depth knowledge in the microfinance operations.

The researcher also ensured that the interview process was not biased, fostering any form of elite capture. As such, both new entrants and old clients were recruited to participate; this was because both groups would offer the study the benefits of different perspectives of their lived experiences. However, interviewees (staff of institutions) were selected purposively based on their position, knowledge and also their interfacing responsibilities with clients[37]. Also, senior-level management members of the MFIs were interviewed to gain insights into how products and implementations were designed.

4.5.6 Focus group discussions (FGDs)

The importance of FGDs cannot be overemphasised in development research. An FGD is a form of group interview comprising of several other participants, including the moderator (in most cases the researcher). The participants in FGDs are usually selected based on a demonstrated level of knowledge on the underlining issues being discussed (Bryman 2015). Following the prescriptions of Krueger and Casey (2002), the characteristics of the FGD involved a minimum of six and a maximum of eight members for each session.

The use of FGDs allowed the researcher to build a detailed understanding of people based on their lived experiences, and further, allowed the researcher to appreciate why some respondents feel the certain way they do. According to Bryman (2015: 503), “in a normal individual interview, the interviewee is often asked about his or her reason for holding a particular view, but the focus group

[37] In the case of the three institutions, interviews with clients about their daily business operations were mostly conducted with the field officer, project officers and mobile bankers.

approach offers the opportunity of allowing people to probe each other's reasons for holding a certain view".

Following the thematic issues that emanated from the in-depth interviews, FGDs were conducted with identified vital informants, and their responses were used for purposes of triangulation. By structuring the FGDs around the main themes and issues that emerged from the questionnaire administration and interviews that were consistent with the research objectives, the researcher was assured of the validity of the responses. The formation of the participants of the FGDs was done with recourse to the sociocultural and power relations embedded in the social structure of the study area; this eschewed the tendencies of participants being biased towards a particular group.

For example, due to the system of patriarchy in the research area, the selection of participants for FGD was carefully made to avert any possible biases against females and young people involved in the study. The conduct of the FGDs also took into consideration the group dynamics, gender dynamics and power relations that were characterised in discussions that involved both males and females. Also, where applicable, discussions/interviews were conducted with female discussants after permission had been given by their husbands. A total of ten FGDs were conducted, with the researcher ensuring that all the discussions and group formation did not go against any cultural beliefs and protocols in the community.

4.5.7 Data entry

The data entry stage followed immediately after the completion of both quantitative and qualitative data collection. The set of the administered questionnaire was carefully vetted to address any errors and other irregularities that may have occasioned during the completion of the administration of the questionnaire. Following the duteous scrutiny, some anomalies were found, and in some instances, the questionnaire was sent back for rectification. The quantitative data was first coded and captured using SPSS, and later converted into Excel to allow for the flexibility and transferability of the data to other analytical software such as STATA.

Furthermore, the researcher also ensured that all open-ended questions in the questionnaire were coded to reflect the category of responses. Additionally, different SPSS files were created to represent the various components of the questionnaire, while keeping the original complete file for reference purposes. The creation of different SPSS files was an effective data management strategy that allowed the researcher to expediently identify variables of interest without having to go through the whole variable set.

In order to check for data accuracy and the consistency of the variables, the study initially conducted preliminary cross-tabulation and some trial multiple regression analysis. In effect, variables and their accompanying categories that were found to be incongruous were recoded to meet the analytical specifications. In some instances, where there were few responses for a particular variable category, they were recoded to make adequate statistical sense. Also, where a particular variable had no responses for some categories, such response category was dropped.

Regarding qualitative data, interviews and FGDs were immediately translated and transcribed at the same time; this was done in an early stage such that the analysis could still benefit from the uncaptured personal memories of the researcher while in the field. Admittedly, this process was both Herculean and slow, but it was essential to ensure that recorded voice transcripts were accurately recaptured and reflected the intended meaning of the respondent. After the transcription process had ended, the researcher also keenly listened to the audio transcripts of the interviews and matched them with the written transcripts; this was to identify and rectify any possible errors and omissions that may have occurred.

4.6 Quantitative data analysis

The analysis of the quantitative strands of the study was carried out using SPSS, STATA and Excel. The researcher preferred the use of SPSS in conducting preliminary analysis since it was viewed as appropriate and user-friendly for breaking down the multi-faceted survey data. The use of STATA was precisely deployed to create MPI for households of the respondents surveyed. The use of Excel was suitable for formatting tables, and charts extracted from

STATA and SPSS, were particularly convenient for the analysis of historical data to establish and show trend lines of socioeconomic data.

At the primary stage of the quantitative analysis, SPSS was used to conduct cross-tabulations on several variables to establish chi-square relationships between these variables. In effect, the choice of chi-square tests in examining the associations between the variables of interest in the study was appropriate in identifying variables that were statistically significant and hence flagged for further explanations in the writing-up stage of the thesis. The use of SPSS for further analysis was also involved in generating other descriptive statistics such as tables, charts and graphs revealing their corresponding statistical frequencies relating to the survey sample.

The final stage of the quantitative analysis carried out different regressions, such as: ordinal logistic and OLS regressions. The regression analyses were conducted to establish the various relationships that exist across some sets of dependent[38] variables and a selection of independent variables. For example, the OLS regression was used to examine the relationships that exist between clients' participation in the design processes of microfinance products and services, and the contribution to their business and household outcomes.

In analysing research data, identifying the appropriate analytical tool that suits the data set is central to generating the required findings. As such, the researcher identified the ordinal logistic regression as convenient in undertaking some analysis because of the nature of the variables. For example, all the dependent variables for all the ordinal logistic regressions were composite (see all the ordinal regression output tables attached in the appendix to chapter six).

The researcher could have used multinomial logistic regression techniques to undertake the same analysis, however, that would have meant that the dependent variables would have lost their inherent ranking as ordered in the questionnaire (Borooah 2002; Norusis 2010). In dealing with ordered or ranked data, ordinal logistic regression generates the most accurate and valid because it employs techniques designed to fit the essential ordered features of the data. The use of logistic regression allows for the predictability of the relationships

[38] See appendix 4.1, 4.2 and 4.3 for a summary of how the various dependant variables were aggregated or derived.

between a dependent variable and multiple predictor variables to offer much understanding of a complex social phenomenon.

In this direction, the application of multiple regression methods such as ordinal logistic and OLS regression allows the researcher to control for some variables that may have a confounding effect on the study. As such, most of the control variables in all the multiple regressions undertaken in this study were identified depending on the nature of the analysis. However, the common control variables were; age, gender and location, among other demographic data of respondents.

4.6.1 Regression model specification

The ordinal logistic regression[39] is an extension of the binary logistic model for handling ordinal response variables. In explaining the specifications of the ordinal model, much of what is presented here is adapted from (Norusis 2010). While the binary logistic regression model estimates a set of regression coefficients that predicts the probability of an outcome of interest, such as the parameters set out below:

$$\ln\left[\frac{\text{prob(event)}}{(1-\text{prob(event)})}\right]=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\cdots+\beta_kX_k \text{ ....} \mathbf{(1)}$$

The quantity to the left side of the above model is called the logit. It represents the log of the odds in an event occurring. In other words, the odds of an event happening is, for example, the ratio of the number of people subject to an event to the number of people who are not subject to an event. In effect, the ordinal logistic model transforms the binary logistic model to incorporate the ordinal nature of the dependent variable. In the case of Polytomous Universal Model (PLUM), rather than assessing the probability of an individual event-occurring model, it considers the probability of that event occurring and all events that are ordered before it. This is referred to as cumulative probability. Regarding a three-category ordered variable, the ordinal logistic models of the odds (θ) are as follows:

[39] The ordinal logistic regression also known as Polytomous Universal Model.

$$\theta_1 = \frac{\text{prob(score of 1)}}{\text{prob(score greater than 1)}}$$

$$\theta_2 = \frac{\text{prob(score of 1 or 2)}}{\text{prob(score greater than 2)}}$$

$$\theta_3 = \frac{\text{prob(score of 1,2,or 3)}}{\text{prob(score greater than 3)}}$$

The last category has no odds because the probability of scoring up to and including the last score is 1.

All odds of the response category *j* are in the form:

$$\frac{P(y \leq j)}{P(y > j)}$$

Where *y* denotes the ordinal response variable.

As such, for a single independent variable, the ordinal logistic regression is modelled thus:

$$\ln \theta_j = \alpha_j - \beta_x \ \ldots\ldots\ldots \ \mathbf{(2)}$$

Following the above, the researcher formulated an ordinal regression model. Two dependent variables[40] were used: household outcome (equation 3) and business outcome (equation 4). The research strategy for using these two dependent variables was to examine the relationships with the independent variables[41] of interest for the study.

$$\boldsymbol{ln\ y} = \beta_0 + \beta_1\lambda_1 + \beta_2\lambda_2 + \beta_3\lambda_3 + \cdots + \beta_k\lambda_k \ \ldots\ldots\ldots\ldots\ldots\ldots \ \mathbf{(3)}$$

$$\mathbf{ln}\,\boldsymbol{y_i} = \beta_0 + \beta_1\lambda_1 + \beta_2\lambda_2 + \beta_3\lambda_3 + \cdots + \beta_k\lambda_k \ \ldots\ldots\ldots\ldots\ldots\ldots \ \mathbf{(4)}$$

Where:

$\ln y$ = Household outcome (ordinal variable)

$\ln y_i$ Business outcome (ordinal variable)

The study also used an OLS regression to assess the relationship between the dependent variable and the independent variables. The dependent variable in

[40] The aggregation of the dependent variables for the ordinal logistic regression model is shown in appendix 4.3.

[41] The full complement and definition of all the independent and dependent variables are shown in table 1 and 2 of appendix 4.4.

the OLS regression model was aggregated or computed using PCA[42] – a dimension reduction technique.

$$\boldsymbol{\gamma} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \cdots + \beta_k X_k + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots \textbf{(5)}$$

$$\boldsymbol{\gamma_i} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \cdots + \beta_k X_k + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots \textbf{(6)}$$

Where:

$\boldsymbol{\gamma}$= Household outcome – dependent variable (continuous variable)

$\boldsymbol{\gamma_i}$= Business outcome – dependent variable (continuous variable)

4.7 Qualitative data analysis: FGDs, interviews and observations

The analysis of transcripts of interviews, FGDs and observations constituted the basis of the study's qualitative strands of the analysis. The analysis of the qualitative data was guided by Connolly (2003) three-stage procedure in qualitative analysis. These three stages applied include the generative stage, interpretive stage and theorising stage. The generative phase is concerned with coding the qualitative data into themes consistent with the research objectives and questions. At this stage, transcripts of the audio interview recordings were discarded appropriately in line with the ethical considerations for this study.

However, at the interpretive stage of the analysis, the researcher further reduced the data and identified any patterns in the themes established at the generative phase. Establishing these patterns enabled the researcher to understand the scale of the social reality being studied critically.

Since the study employed a convergent parallel mixed-methods design, it meant that both qualitative and quantitative analyses were to be done concurrently. Following this methodological protocol, the theorising stage of the qualitative analysis was carefully conducted together with the quantitative data. In doing all these analyses, both quantitative and qualitative, the researcher

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[42] Details on how the dependant variables (household outcome and business outcome) were computed using PCA is indicated in appendix 4.2.

was guided by the analytical framework[43] that was designed to help filter the data, synthesise the findings and reveal knowledge about the phenomenon being examined. It is important to highlight that the interview guide and other data collection tools were all designed based on the analytical framework[44].

The study also made use of observations from the field to augment data from the interviews, FGDs and the research questionnaire. Observations in the field were considered vital ingredients to the analysis because individuals' actions and behaviours are inextricably essential in research. The work of Robson (2011: 315) says the technique in observations is to "watch what they do, to record this in some way, and then to describe, analyse and interpret what we have observed".

In undertaking this study, the researcher carried out covert naturalistic observations[45] to buttress some of the information that was provided in the questionnaire or during the interviews and FGDs. Indeed, the covert naturalistic observation was deemed appropriate because of the distinct disadvantage that affects the situation or condition being observed in the case of participant observation. In essence, the use of covert naturalistic observation techniques allowed for the researcher to make salient notes without affecting the situation or mood being observed. The researcher, in completing the set of questions on the MPI of households, found there was a need to observe certain household conditions, such as availability of electricity, cooking fuel (charcoal, firewood and others) and household flooring makeup (sand or dung), among other indicators.

In some instances, where what had been observed appears different from what the respondent indicated in the questionnaire or interview, the researcher would rephrase the question(s) for clarity. The study also observed the non-verbal cues and other physical gestures made by respondents during the interviews and the FGDs. Observations of such were essential in order to know whether respondents were comfortable expressing themselves on the issues being

[43] See appendix 1 for the analytical framework of the study.
[44] The analytical framework was designed to reflect the research objectives and questions, in order to help address the research problem.
[45] This is the type of observation that is done without intervention. In naturalistic observation, the observer looks at the behaviour as it occurs in its natural settings with no attempts at intervention on the part of the researcher (Cherry 2015).

discussed. In some jurisdictions in Ghana, particularly in the north, where this study was carried out, certain non-verbal gestures could signal an individual's disapproval or approval on an issue.

4.8 Analysis of secondary data

The study also sourced and analysed secondary data to support the primary data sought from the field. The use of secondary data was mainly used to buttress findings from the analysis of both quantitative and qualitative primary data sourced from respondents. In some instances, secondary data served as a reference point in making some judgements and drawing conclusions for the research. For example, the choice of the research area was based on available poverty statistics from the Ghana Statistical Service. Most importantly, secondary data provided an adequate basis for analysing and completing a contextual chapter of this thesis on Ghana – providing information on the socioeconomic status.

The study made adequate use of secondary sources such as the fifth and sixth rounds from the Ghana Living Standard Surveys (GLSS 5 and 6), the World Bank development indicators, census data and reports of the 2010 Ghana PHC, as well as data and reports from BOG. In effect, data and reports from the GLSS were used as a reference point to assess the regional distribution of poverty and the outlook of other socioeconomic indicators of importance to the study.

The district and regional reports of the 2010 PHC also helped in analysing and describing the socioeconomic and demographic profile of the study area. Additionally, reports, product brochures, flyers and institutional handbooks from the various organisations studied were also relevant secondary sources that added a critical perspective to the thesis. For example, the product brochures were used as a reference point to elicit additional information from clients, regarding their perceptions on featured products and their poverty reduction implications.

4.9 Ethical considerations

The research was carried out following all the necessary ethical considerations. The study recognised the fact that individuals and organisations are guided by morality and ethics, and as such, professionalism was exhibited throughout all the research stages. The importance of ethical considerations in conducting social research cannot be overemphasised primarily when it involves fieldwork. The process of fieldwork involves interference into the private lives of people and respondents, given the fact that they are required to provide personal information that stands the risk of exposing them to danger. Indeed, respondents revealing privileged information about their livelihood activities and lived experiences to a researcher – ‘a total stranger’ – require guidelines to assure them of the adequate protection of their private information.

In carrying out this study, the researcher took into cognisance the potential danger respondents may face if personal information they divulge is not well protected. The researcher identified three strands of the potential risk to respondents, namely: risk at the household, community and institutional levels. The study recognised the fact that information disclosed needed to be protected from other household members, community members and the staff of the respondents’ financial institutions. As such, with the potential danger of respondents in mind, the researcher needed to observe the ethical considerations stipulated and approved by the University of Bradford.

In following the ethics guidelines for this study, the researcher provided potential respondents with an invitation to participate in the research. The invitation provided would-be respondents with all the relevant information they needed to know about the study, including ethical considerations, the consent form and the contact details of the researcher. In effect, potential respondents were informed of their rights and obligations in the study process, as well as the potential benefits and risks of the study. The researcher was explicit in both written and verbal communication with the potential respondents that their participation in this research process was entirely voluntary, devoid of threats and also without any financial compensation.

In this study, the researcher also held the position that obtaining informed consent was considered a continuous process throughout the entire fieldwork enterprise and not a mere one-off event. Additionally, potential respondents were informed that they could withdraw from their participation in the process at any point in the exercise. Nevertheless, given the high rates of illiteracy, particularly in rural communities, it became apparent for the researcher to make use of verbal consents. The process involved reading each line of the consent form and translating the same to the full understanding of the potential respondents.

Because the study envisaged the participation of vulnerable groups and persons with disabilities, the researcher made provisions for sign-language interpretations for hearing-impaired participants.

The anonymity of participants in the study was also viewed to be necessary given the public nature of the research. In guaranteeing anonymity, participants that wanted to be anonymous were given pseudo names to protect their identity. In following all the prescribed ethical protocols, the researcher further made sure the scheduled time and location for both interviews and questionnaire administration were convenient to both the participants and the researcher. All the activities about data collection were carried out during the day, with all questionnaire and interview appointments scheduled between 9.30am to 3.30pm. The availability of daylight in the scheduled time for the research exercise gave the researcher and participants extra personal security and safety.

4.10 Chapter summary

This chapter delved into the various epistemological and ontological foundations underpinning the study and gave a precise overview of the pragmatist approach to this study. The study also touched on the mixed-methods approach, which combines quantitative and qualitative methods of data collection and analytical procedures. Because of the eclectic nature of the research question, and the accompanying objectives of the study, generating data through a mixed-methods approach enabled the researcher to gain a much broader and diverse perspective on how microfinance products are designed and their poverty reduction implications. Indeed, the merit of the methodological approach employed in this study resonates with the fact that the structured survey offered a broader outlook of the microfinance clients' perceptions of the various issues of the research inquest. Whereas the interview component of the study carried out a more in-depth exploration beyond the questionnaire stage, to offer a more critical insight into clients' lived experiences on the activities of microfinance and how their operations could be designed to work effectively for the poor. The methodology of the study was designed based on two major theoretical underpinnings – SLA and M4P – which provided a clear analytical framework for disaggregating the nuances in the data to reveal knowledge. Finally, the chapter also reflected on the obstacles the researcher confronted during the data collection process and analysis.

CHAPTER 5

DEMAND AND SUPPLY OF MICROFINANCE: DESIGN OF PRODUCTS AND IMPLEMENTATION

5.0 Introduction

What is the nature of interactions between clients and MFIs in the design of products and services, and how are they implemented to affect poverty? This chapter delves critically into how microfinance products are designed and implemented from the perspective of MFIs and clients. It takes into account the contextual issues of clients, livelihoods strategies and the participation of clients in the product design processes. The chapter looks at two essential components of the microfinance market (supply and demand). The supply-side critically analyses factors considered by MFIs in the design and implementation of products and services. On the demand side, it explores the extent to which household characteristics are reflected in microfinance product designs. The chapter also considers how various group-lending, individual loans and savings products for clients were designed and whether their needs were taken into account by MFIs when designing the products.

5.1 How are contextual issues and the needs of clients considered in the design of microfinance interventions?[46]

The design of demand-driven microfinance interventions has gained traction and particularly helped to move the industry discourse from its traditional focus on quantity to one that takes in both quantity and quality of the microfinance services provided (Chao-Beroff 2001). Demand-centred products and services require a detailed understanding of clients' poverty context and other

[46] To assess the contextual issues evident in the demand and supply of microfinance. The analysis in this section reveals knowledge on whether the institutional designs of microfinance products are consistent with the livelihoods of clients. The nature of the design of microfinance products can determine their effectiveness in poverty reduction. As such, taking the poverty context of clients into consideration is imperative.

sociocultural issues that influence clients' livelihoods. Such critical contextual issues until now have been ignored or loosely explored.

An understanding of the various causes and structures that perpetuate poverty can help policymakers to design effective strategies to eliminate it. One of the underlining bases for this study is hinged on the fact that microfinance interventions must reflect the realities of end-users' poverty context. When the staff of SAT, CCU and SRB were asked whether they considered the causes of poverty of clients in their design and implementation processes, responses to this were mostly different across the board.

The response from the perspective of the staff of SAT was that it was difficult for their organisation to place into context the differences in the causes of the poverty in the various communities in the design of products. Accordingly, "SAT's interventions are designed at the head office and sent down to all branches to implement". The ultimate responsibility of the staff at the branch level is to publicise and create demand for the products designed. The officer in charge of SAT in Jirapa further had this to add to his response:

> We do not have a product development team here at the branch level, so everything about developing new products and reviewing existing products is done in Kumasi, head office. It would be difficult for head office to capture the varied causes of poverty across all the branches when developing new products. The product we have at this branch is the same across the country (Manager, SAT).

However, the response was different from CCU staff who indicated that clients' poverty context is central in their product development processes. They further added that the credit union is a localised member-owned institution that must prioritise the interest of its members irrespective of other operational motives. Accordingly, the staff are of the firm opinion that the continued relevance of the CCU depends on the institution's responsiveness to the challenges that affect its members.

> Because the CCU is a member-owned institution, with most members/clients residing within this municipality, we know ourselves. We have an idea of the challenges most of our members face in each community. So, we design products in response to challenges as they arise. We have some seasonal products, for example, for farmers during the raining season and during the dry season (Manager, CCU).

Additionally, the staff stated that the institution holds annual general meetings (AGMs), where members raise specific end-user concerns for consideration and adoption. This platform enables the product development team to continually contextualise clients' perspectives and expectations from both existing and new products.

On the part of SRB, the staff indicated that the bank provides a variety of services consistent with conventional banks. However, SRB has a special projects division responsible for microfinance-related activities in the Jirapa municipality. Like the CCU approach of contextualising clients' poverty context, SRB provides its products to solidarity groups with the same poverty peculiarities. The view of the staff is that identifying the underlining commonalities among groups enables the project team to develop products that reflect their poverty context.

> Some of our microfinance clients get poor crop yields because of the infertility of the soil and other related issues. As a result, they are not able to meet their household needs because they depend solely on farming. That is when we step in to assist with services that support them to purchase farm inputs such as fertilisers and improved seeds (Manager of Project Division, SRB).

In the case of both CCU and SRB, there is an overwhelming consensus among the staff that local context and poverty dynamics feed effectively into their product designs. That is because both institutions have their origins in the Jirapa municipality. Both local-based institutions have a better understanding of the poverty context in the various communities in their various catchment areas. For instance, staff of both CCU and SRB did indicate that understanding the unique development challenges and potential evidence in each community helps in designing adequate products in response to clients' context. A CCU staff member responsible for liaising with the institution's microfinance clients had this to say:

> We have a good knowledge of most of the members [clients]. Some are settlers from other communities; others are indigenous persons. Because of our regular interactions, we know their yearly grinds either as smallholder farmers or retailers; so, attempt to develop products that meet their context (Field Officer, CCU).

In all the three institutions studied, the staff confirmed that understanding the diversity of clients' portfolios, together with the seasonality of their cash flows, helps to design adequate financial tools. Albeit, this was not the practice at SAT, as product development is centralised at the top level and outside the operational area. In all these, understanding the profound differences in poverty from the context of rural and urban, and household-based and community-based poor is also crucial in developing products that transcend the traditional microfinance delivery channels.

Establishing a framework that recognises and captures contextual issues and characteristics of vulnerable clients living in different areas is crucial to effective product designs (Moore et al. 1998; Fincher et al. 1998; Watson 2003; Gopinath et al. 2014). Preliminary interviews with the staff suggest that this argument appears to be the practice at CCU and SRB, but not at SAT, which has a centralised operational model with its product development. However, this claim needed to be confirmed from the position of the client. Subsequent analysis interrogates this claim further.

5.1.1 Clients' perceptions of the causes of poverty

On the demand side, clients' perceptions of contextual issues in product designs matter. Following the assertions made by the staff of SAT, CCU and SRB, this aspect of study sought to establish whether contextual issues regarding their poverty status are being captured in the design of microfinance interventions. An adequate understanding of the perspectives of clients' realities, aspirations and perceptions of their poverty context at a granular level, can serve as the basis for designing effective financial products (CGAP 2014). The inclusion of clients' assessment of their household poverty context matters because it helps to capture their knowledge and different lived experiences in coping with vulnerabilities. Such lived experiences are essential in designing strategies and financial tools for sustainable poverty reduction (Norton et al. 2001).

The study sought to establish clients' poverty status from a subjective perspective of household self-assessment[47] of their lived experiences and

[47] The use of household self-assessment of poverty draws theoretical basis from the Participatory Poverty Assessment (PPA) approach. PPAs have been defined as "an instrument

coping strategies. A majority of the clients assessed their poverty context/status and indicated they were poor. Though indicating they had access to food and housing, they felt constrained in some aspects of their livelihood. For example, one client indicated that it was very difficult for her household to access health care, while another said his lack of education made it difficult to access credit easily.

The study delved further into understanding what the clients perceived to be their major causes of poverty in the study area. There were essential differences in the causes of poverty among clients (see table 5.1). These critical differences observed make a clear indication of the heterogeneity of poverty and the need to design different response tools for tackling each related cause.

Table 5.1 Inadequate finance and unemployment are the leading causes of clients' poverty[48]

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Inadequate finance	9	32.1	32.1
		Unemployment	5	17.9	50.0
		Poor Soil Fertility	8	28.6	78.6
		Lack of Market Access	6	21.4	100.0
		Total	28	100.0	
CCU	Valid	Inadequate finance	9	21.4	21.4
		Unemployment	14	33.3	54.8
		Poor Soil Fertility	6	14.3	69.0
		Other(s)	3	7.1	76.2
		Lack of Market Access	10	23.8	100.0
		Total	42	100.0	
SRB	Valid	Inadequate finance	17	34.0	34.0
		Unemployment	8	16.0	50.0
		Poor Soil Fertility	6	12.0	62.0
		Large HH Size	11	22.0	84.0
		Lack of Market Access	8	16.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

As seen in table 5.1 above, 33.3% of the clients of CCU indicated unemployment as the leading cause of their household poverty, with 32.1% and 34% of SAT and SRB clients respectively saying inadequate finance is their primary cause of household poverty. Accordingly, the data revealed that poor soil fertility (28.6%, SAT), lack of market access (23.8%, CCU) and large

for including poor people's views in the analysis of poverty and the formulation of strategies to reduce it through public policy". See: Norton et al. (2001).

[48] The responses captured under 'others' were predominantly related to household characteristics, macrolevel factors such as inflation and interest rates.

household size (22%, SRB) were the second most prevailing causes of poverty among the clients.

The above analysis (table 5.1) shows that there are different causes of poverty in the study area, according to the clients. It is essential to emphasise that viewing the poor as a similar unit (with the same poverty context) can be misleading, and therefore undermine any designed strategies to fight poverty.

In this regard, through poverty analysis, MFIs could play a facilitating role to ensure clients with non-financial causes of poverty have access to other supporting mechanisms. A key point to note, at this juncture, is that clients need access to a coordinated blend of microfinancial products together with other complementary development services to increase income and address their daily challenges, build assets and improve health, nutrition, family planning, improve soil fertility and agricultural yields, education and more. The addition of such necessary complementary services intended for the clients has the propensity to contribute to enhanced operational efficacies and synergies of benefits to clients and service providers (Field et al. 2009; Gray et al. 2011).

The design of products and services that are fit for purpose does matter in tackling the causes of poverty, instead of addressing their symptoms with tools and interventions that are unidimensional. Consistent with the argument that microfinance providers should design tools that address the poverty context of users, the study sought to establish whether that was indeed the case on the grounds. As shown in table 5.2 below, the study established that 32.1% (SAT), 71.4% (CCU) and 40% (SRB) did indicate products and services offered by their service providers reflected their poverty context or needs.

Table 5.2 Do the products and services of SAT, CCU and SRB reflect clients' poverty context and needs?

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	No	19	67.9	67.9
		Yes	9	32.1	100.0
		Total	28	100.0	
CCU	Valid	No	12	28.6	28.6
		Yes	30	71.4	100.0
		Total	42	100.0	
SRB	Valid	No	30	60.0	40.0
		Yes	20	40.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The responses of SRB clients on this subject matter were particularly surprising as they appear to be mostly inconsistent with claims made by the staff when they were interviewed. Accordingly, about 60% and 67.9% of SRB and SAT clients responded on the contrary, that products offered reflected their poverty context or needs. These statistical revelations also showed that CCU was the only institution with consistency between what the staff indicated and the actual implementation from the perspective of clients. An explanation for this could be drawn from the fact that CCU is a member-owned institution, founded on the principles of social movement[49] and self-help.

The established structure of communication and democracy evident in the operational models of CCUs necessitates clients' involvement in all stages of the product designs (Ofei 2002). Some interviews granted to clients to triangulate the quantitative findings in table 5.2 above, had the following responses regarding whether microfinance products reflect their needs. A smallholder farmer, with only a few livestock, married with three wives and 12 children, living in Chaperu, a rural community, had this to say:

> I do not think that the products of SRB meet my needs, I have three kids who are in senior secondary school now, I have always been unsuccessful when I approach them regarding getting credit to pay their school fees. They always ask for collateral or guarantors. I do not have any of these requirements. As a result, my household is left with no option than to sell some grains or sometimes livestock at cut-throat prices to pay school fees (Issaka Bayor, SRB).

Another interviewee, a dressmaker but seasonally employed, based in Jirapa central, the municipal capital, had this to say:

> The problem I face has to do with lack of market [sales] for the dresses I make. The only time I am active with some substantial sales is during festive periods. So, even if I take a loan, there are limited chances for profitability for now. As a result, too, my savings with them have been considerably low. If I do not have much to feed my household, how can I save? [She asked] (Alice Aayel, SAT).

These two interviews reveal further information on the causes of household poverty, as discussed earlier (see table 5.1). Issaka's main challenge stems

[49] Social movements form part of collective action that originated in response to conditions of inequality, oppression and/or unmet socioeconomic, political or cultural demands. They comprise "an organised set of constituents pursuing a common political agenda of change over time" (Batliwala 2012: 3).

from inadequate finance, but his relatively large household size also limits the household ability to accumulate assets. However, mechanisms used in addressing such needs (outside the remit of financial services) could expose households to future vulnerabilities. For example, selling household food grains could result in more frequent episodes of hunger[50]. The narrative from Alice is also not different and mirrors her household poverty context, seasonally unemployed with inadequate market access.

It is worth noting that most MFIs, mainly operating in rural areas, appear to have a misalignment with their operational objectives and the needs of the clients (Montgomery and Weiss 2005a). That could be a recipe for the exclusion of some poor people in the implementation of interventions or lead to limited impact, or both. The subsequent chapter (six) discusses this schism in detail to establish whether the design and implementation of microfinance interventions have implications for poverty reduction.

An essential step to ensuring the success of financial services for the poor is the overlap between the aspirations of clients and the objectives of service providers (Frankiewicz and Churchill 2011; Mattern and Tarazi 2015). One sure way of ensuring this overlap is to regularly consult and involve clients in the product design processes and regularly revise existing products by incorporating feedback from clients. That way, microfinance products would not only be in tune with clients' poverty context but also consistent with their sources of livelihood.

5.2 Product design processes and livelihood analysis of clients

The previous section of the chapter attempted to analyse and build an understanding of clients' poverty context and how financial services can adequately address the reasons why people are poor. However, it is not adequate for policymakers that aim to tackle poverty to focus on only an understanding of poverty as a means of fighting it. There is a need for a livelihood analysis to complement the understanding with an equally exhaustive

[50] The use of some coping mechanisms for certain needs and shocks may have negative consequences for the household. These are discussed later in the chapter on livelihood analysis of clients in the product design processes.

view of people's assets and negative aspects of their lives, as well as the potential to build on their strengths (Dittoh 2008).

Livelihood analysis matters in financial product designs. How do clients make ends meet? Understanding the livelihood realities of people is supportive in designing adequate tools to enhance their assets and manage their vulnerabilities. Several studies have affirmed the importance of livelihood analysis in the framework of sustainable livelihoods as a useful conceptual base for understanding both rural and urban poverty. It also provides a solid foundation for understanding the different conditions in which people living in poverty can be supported through useful tools and policies (Kuu-Ire 2009).

Analysing livelihoods in respect of individuals, households and communities helps to examine the coping and adaptive mechanisms pursued as a response to shocks and vulnerabilities such as loss of livestock, adverse climate and anti-poor social policies regulatory frameworks (Gash and Gray 2016). "A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, and provide sustainable livelihood opportunities for the next generation, and which contributes net benefits to other livelihoods at the local and global levels and in short and the long-term" (Chambers and Conway 1992: 7). Every individual and their respective households and communities have assets with specific strategies used to support his or her existence. To this end, microfinancial services need to fill the gap in providing services that support clients' household asset accumulation and building resilience to shocks (Gash and Gray 2016).

5.2.1 Livelihood assets and strategies[51]

Access to livelihood assets at both communal and household levels matters for several reasons, including to design people-centred interventions. The diverse nature of livelihood assets available to rural residents provides a considerable

[51] The impact of livelihood assets on clients' households and businesses are discussed further in chapter seven, which also discusses how such livelihoods could be harnessed to increase livelihood outcomes with appropriate microfinance product/intervention design.

influence on the benefits they generate. However, the ownership and scale of dependence on such livelihood capital/assets varies across households in different communities (Bebbington 1999). The reasons that account for household economic reliance on specific livelihood activities (such as farming or petty trading) in general and specifically on livelihood asset may differ depending on the type of resource endowment of the community, demographic conditions of households, as well as economic characteristics and other exogenous factors such as markets, prices and policies (Brown and Brown 2006).

In the context of Jirapa municipality, communal ownership of natural resources, such as land, water bodies and trees, among others have implications for household access to support their livelihood. At the community-wide level, a vast majority of respondents (80%) who indicated land (15%), mentioned trees and 5% said water bodies as the primary natural capital available to their communities. However, the mere availability of a natural resource (capital) in a community does not guarantee households access to support their livelihoods. In the case of the Jirapa municipality and particularly the various communities involved in the study, access to natural capital is shrouded in power relations with implications for household access.

Regarding land, the essential resource in the study area, ownership is in the hands of specific families (as family lands) and the community (communal land). Some issues revealed in an interview suggest that access to land – especially for agricultural purposes – depends on landowners' willingness to provide it on their terms and conditions.

As a result, households who do not own permanent family lands are unable to take long-term investment interest in such lands. Further analysis shows that clients who own family lands do not have legal land titles as proof of ownership. Although clients who made a strong claim of ownership of family lands are recognised by local authorities, such as the community chief, such ownership can only be described as extra-legal and is not unequivocally allocated to an individual or household by law.

As such, most clients get trapped in the linear use of land for agricultural purposes only without the ability to use their landholding as security (poor property rights) for loans. The work of De Soto on the informality of land ownership (lack of land title) in developing countries contends that individuals would not realise the full benefits of their land or property. Accordingly, formalisation of land ownership through title deeds not only offers security for clients to access loans but also an individual or household's proof of wealth. Access to property rights helps to reinforce business trust, guarantees and social capital that unlock domestic capital for development (De Soto 2001). Microfinance should serve as a development tool and not merely a service. In this context, SAT, CCU and SRB could provide the necessary support mechanism[52] to help clients formalise their land ownership. In this vein, SAT, CCU and SRB could then securitise clients' landholdings in their subsequent design of interventions.

Regarding livelihood strategies, households' involvement in agricultural activities remains the dominant sector that contributes to household income and as a source of employment in many developing countries. The IFAD (2001) suggests that in the absence of non-farm income-generating activities, agriculture remains the primary source of livelihood for most households. The sources of livelihood can be viewed as positive when they contribute to supporting households to become more robust and less vulnerable, or negative when it further leads to loss and decrease in the asset stock of households. This narrative is not different in the context of Ghana and the context of the study area. The study revealed that active involvement in agricultural activities appeared to be the principal occupation of household heads.

In summary, about 79% of all the clients across the SAT, CCU and SRB said their primary source of livelihood was in agriculture. However, access to arable land is critical for a livelihood activity such as agriculture to be sustainable. In all the communities used in the study, agricultural land is customarily owned by families, or in some cases held in trust by the chiefs on behalf of the people. Understanding the livelihood strategies and the assets that support clients

[52] Providing the necessary supporting functions to ensure the microfinance market works adequately for the poor requires the interactions of both various state and non-state actors and a critical review of policies that impede development. Chapter seven of the thesis discusses this in detail.

would help in identifying and designing useful interventions from MFIs. In effect, clients within the same livelihood framework should be treated differently with interventions that meet their needs.

In FGD with a group of vegetable farmers in Hain, a majority of the discussants said they had inadequate access to the market for their produce during harvest. They further added that ensuring market linkages to aggregators who would buy their produce at guaranteed prices would be preferred. However, a small number of discussants disagreed with the notion of providing aggregators and instead called for the government to improve road access to their community. These divergences in needs, even among clients within the same livelihood activity (crop farming) show the need for more product differentiation taking context into account. Table 5.3 below gives a broader perspective of the livelihood strategies of clients in the study area.

Table 5.3 Mixed farming is the major livelihood activity/strategy among most clients

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Crop Farming	8	28.6	28.6
		Livestock Rearing	3	10.7	39.3
		Mixed Farming	10	35.7	75.0
		Petty Trading	5	17.9	92.9
		Regular Job	2	7.1	100.0
		Total	28	100.0	
CCU	Valid	Crop Farming	8	19.0	19.0
		Livestock Rearing	6	14.3	33.3
		Mixed Farming	22	52.4	85.7
		Petty Trading	4	9.5	95.2
		Regular Job	2	4.8	100.0
		Total	42	100.0	
SRB	Valid	Crop Farming	8	16.0	16.0
		Livestock Rearing	12	24.0	40.0
		Mixed Farming	18	36.0	76.0
		Petty Trading	9	18.0	94.0
		Regular Job	3	6.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

Table 5.3 above, shows that 35.7% (SAT), 52.4% (CCU) and 36% (SRB) indicated mixed farming as the significant livelihood activity of their household. A diversified livelihood strategy, such as a mixed farming system (crop and livestock production), is commonplace in the northern savannah agro-ecological zone of Ghana where the study is located. The mixed farming system was found to be dominant in the various communities primarily because the seasonal rainfall pattern only allows for one growing season for crops. As such, livestock rearing in this context fits in well as a complementary source of livelihood during the dry season and serves as a household's savings bank and insurance when they experience livelihood shocks (Oppong-Anane 2006).

5.2.2 Livelihood vulnerabilities/shocks

Whereas the previous sections analysed the sources of livelihood of clients and their households, this section presents findings on clients' coping mechanisms for shocks, as well as analysis of whether MFIs design products to support their clients in responding to and managing shocks. This analysis of the coping mechanisms contributes to shedding light on the neglected roles that MFI products need to play in improving household resilience to shocks, by supporting clients to build up savings and assets for sustainable poverty reduction.

The analysis in table 5.4 below shows that 67.9%, 31% and 58% of SAT, CCU and SRB clients respectively indicated that their institutions did not design products and services to enable them to manage adverse shocks. Although some shocks did not require a financial response to manage, clients complained of the inability of their financial institutions to play a coordinating role with relevant agencies to help them respond to shocks. For example, some clients lost their livestock due to lack of access to veterinary services.

Table 5.4 Do the current MFI products and services help clients manage livelihood shocks?

Name of Financial Institution			Frequency	Valid Percent	Cumulative Percent
SAT	Valid	No	19	67.9	67.9
		Yes	9	32.1	100.0
		Total	28	100.0	
CCU	Valid	No	13	31	31
		Yes	29	69	100.0
		Total	42	100.0	
SRB	Valid	No	29	58	58
		Yes	21	42	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

It is worthy of note that clients in this study experienced several shocks that affected their ability to build up assets and financial savings. Livelihood shocks are unavoidable in every setting; however, household coping and adaptation mechanisms are crucial if households are to be able to patch their lives together in a sustainable way after experiencing these shocks.

Table 5.5 below shows a quantitative analysis of the most dominant shocks experienced by clients' households in the past two years. Accordingly, clients of SAT (35.7%) and CCU (42.9%) indicated poor harvest as the major shock they experienced in the past 24 months. However, 36% of SRB clients mentioned the loss of livestock as the dominant shock experienced in the last two years.

Table 5.5 Household shocks experienced in the past 24 months by clients

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Death in HH	5	17.9	17.9
		Illness/Injury	2	7.1	25
		Loss of Livestock	8	28.6	53.6
		Poor Harvest	10	35.7	89.3
		Other Shocks	3	10.7	100
		Total	28	100	
CCU	Valid	Death in HH	3	7.1	7.1
		Illness/Injury	14	33.3	40.4
		Loss of Livestock	9	21.4	61.8
		Poor Harvest	10	23.9	85.7
		Other Shocks	6	14.3	100
		Total	42	100	
SRB	Valid	Death HH	4	8	8
		Illness/Injury	11	22	30
		Loss of Livestock	18	36	66
		Poor Harvest	14	28	94
		Other Shocks	3	6	100
		Total	50	100	

Source: Fieldwork Data (2017)

5.2.3 Clients' coping mechanisms, preferences and risks

In coping with shocks, MFIs need to provide services that transcend the traditional bricks-and-mortar services. Clients need a complement of both financial and non-financial services that help them mitigate stressors, to lessen the effects of shocks to avoid long-term adverse outcomes for households (Gash and Gray 2016). It is vital to ensure that coping and adaptation mechanisms clients apply to deal with livelihood shocks should not be inimical to their continuous asset accumulation. While the continuous accumulation of assets may support households move out of poverty and adequately protect themselves against future shocks, the extent to which it addresses poverty and the security of accumulated assets needs careful consideration (Cook 2007; Moser 2008). The staff of the three institutions could not explain whether current products that have been designed can support clients and their households to recover from livelihood shocks.

In the context of Jirapa municipality, asset accumulation is mostly in the form of keeping livestock and savings. These forms of asset accumulation also constitute the possible fallback mechanisms for managing the shocks that households encounter in eking out their livelihoods. Financial products should be designed not only to meet the needs of users but also to help clients adequately anticipate and deal with their livelihood shocks in a manner that does not lead to negative household consequences in the long run. Financial tools must support the accumulation of livelihood assets that would permanently enable poor households to build their resilience to shocks.

During FGDs with clients, to gain a broader contextual understanding of their coping mechanisms to shocks, these discussions revealed unanimity in clients' concerns regarding the timeliness of the response mechanisms and the effect of the use of negative coping strategies. In particular, a majority[53] of SAT discussants agreed that accessing credit from their financial institution was not immediate enough to help them respond to their household crisis. They intimated that the bureaucracies associated with accessing loans during a period of difficulties (such as a death in the family or poor harvest seasons) do not make it a preferred and effective coping mechanism.

Additionally, the majority of discussants also added that the sale of household livestock had negative development consequences for their households in building up assets since these assets are mostly sold at knockdown prices when they experience emergencies and shocks.

[53] For the purposes of the analysis, 10% of discussants is considered as 'a few'; up to 25% is a 'minority'; between 25% and 40% is considered a 'large minority'; between 40% and 60% is considered 'half'; between 60% to 75% is a majority and 75% and more is considered a 'large majority'.

Surprisingly, a majority of the discussants from CCU services did not consider timeliness as a constraint on the use of their coping mechanisms. They described the ease of accessing ‘emergency funds’ from their CCU during difficult household moments. However, a few of the discussants believed that falling back on their savings to manage shocks affects their household’s ability to build up long-term savings for investments.

In the case of SRB clients, the perception of timeliness in their coping mechanisms during shocks appeared similar to the concerns echoed by SAT discussants. Most of the SRB discussants viewed the support mechanisms from their financial institution not only as slow in responding to clients’ shocks but in some cases non-existent. To this end, a majority of the discussants voiced their frustrations at having to sell their livestock and other household food stock to respond to shocks.

Findings from the FGDs show how necessary it is to understand the critical elements of the mechanisms typically used by clients to manage their livelihood shocks. A better understanding of these mechanisms would enable MFIs’ design of adequate financial services that meet clients’ needs. The design of financial tools that are flexible and responsive to clients’ livelihood shocks enables households to shun the use of negative coping mechanisms and further support them to respond to shocks positively (Cohen 2002; Gash and Gray 2016).

From these discussions, timeliness in responding to shocks is essential. In the context of the study area, reflections on clients’ perspectives indicate that a lot of the shocks occur as a crisis; there is no apparent time to jump through hoops to get credit set aside from their financial institutions. This opinion is particularly resonant with SAT and SRB clients. For example, some clients’ had to address the loss of livestock to diseases by selling some of their livestock to pay for the services of a veterinary officer.

That essentially draws much impetus to the widely held opinion that the poor require more than financial services to work themselves out of poverty. Such complementary services to finance can take the form of social protection and other government support mechanisms to augment microfinance interventions[54] (Cohen 2002; Gray et al. 2011). One critical insight that emerged from the FGDs that is worth emphasising is to eschew mixing positive and negative coping mechanisms (e.g., using savings and selling of household food grains). Indeed, both microfinancial and non-financial services must also be available in adequate amounts and easily accessible so that clients are not required to use several financial means to cover the cost of a shock.

Following the FGDs, the study sought to gain a broader quantitative perspective of the coping mechanisms of clients in the three institutions being studied. Table 5.6 below gives a statistical analysis of clients' coping mechanisms when they experience shocks.

Table 5.6 Use of savings, borrowing from MFIs and sale of household assets/livestock are clients' main coping mechanisms

Name of Financial Institution			Frequency	Valid Percent	Cumulative Percent
SAT	Valid	Borrow from MFI	2	7.1	7.1
		Use of Savings	8	28.6	35.7
		Sell Assets/Livestock	7	25.0	60.7
		Self-help Group	3	10.7	71.4
		Sell HH Grains	6	21.4	92.9
		Loan Default	2	7.1	100.0
		Total	28	100.0	
CCU	Valid	Borrow from MFI	14	33.3	33.3
		Use of Savings	12	28.6	61.9
		Self-help Group	6	14.3	76.2
		Sell HH Grains	3	7.1	83.3
		Loan Default	2	4.8	88.1
		Help from Social Networks	5	11.9	100.0
		Total	42	100.0	
SRB	Valid	Borrow from MFI	3	6.0	6.0
		Use of Savings	8	16.0	22.0
		Sell HH Assets/Livestock	16	32.0	54.0
		Self-help Group	4	8.0	62.0
		Sell HH Grains	12	24.0	86.0
		Loan Default	7	14.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

Table 5.6 suggests that the most common coping mechanisms used by clients included: use of personal savings, borrowing from MFIs and sale of household assets representing 28.6%, 33.3% and 32% of SAT, CCU and SRB

[54] Discussion on the appropriate non-financial services needed to make microfinance work for the poor is discussed in detail in chapter seven.

respectively. Some clients added that their coping mechanism affected their ability to build up savings and other livelihood assets needed to work themselves out of poverty in a sustainable manner. Apart from CCU, which provided emergency loans to their members, SAT and SRB did not have mechanisms in place to help clients respond to shocks of any form. As such, that exposed their clients to other vulnerabilities, with no option than for them to fall back on their already volatile savings and stocks of assets.

To be able to identify more suitable and flexible financial products, one can argue, as Wright (2001) does, that product design begins with understanding client desire and the use of financial services. The staff of all three institutions agreed that they need to put in place strategies that could be used by the poor clients to mitigate their vulnerabilities that result in shocks. In contrast, the current design and implementation of products and services is less likely to be used to cope with the loss of livelihoods after the occurrence of shocks. The work of Cohen and Sebstad (1999) postulates that most MFIs offer products and services that cannot respond to emergencies by delivering small amounts of cash quickly in the face of a crisis. It is worth noting that when an institution does offer emergency loans to the poor, this product has proven to be immensely popular.

5.3 Clients' participation in the product design process

Contextual issues and local knowledge matter in the design of development interventions. This aspect of the analysis seeks to establish the level of participation of clients in the design of interventions. The analysis is hinged on the fact that clients possess an invaluable level of local knowledge relating to various issues about their communities and livelihoods.

The participation of clients in the context of product designs provides the benefit of availing their local knowledge to service providers in the development of interventions intended to improve the livelihood outcomes of clients (Jennings 2000). The basis for analysing the level of participation of clients in the product design processes is because all three institutions involved in the study did indicate poverty reduction as their primary objective. Given the fact that microfinance is viewed to be a people-centred development initiative, there is a need for the participation of stakeholders and particularly clients in the design processes. The involvement of clients increases the prospects that products and services will be context-specific and fit for purpose for clients (Oakley et al. 1991; Pretty 1995; Chambers 1997; McLeod, MacDonell and Doolin 2007).

Table 5.7 below shows a quantitative analysis of clients' level of participation in the design processes of interventions. From the analysis, only 25% (SAT), 57.1% (CCU) and 26% (SRB) of clients indicate high participation in the design processes of interventions. However, about 53.6% (SAT), 16.7% (CCU) and 40% (SRB) of clients said they were not involved in the design processes of interventions. These statistical revelations indicate CCU appears much more democratic and participatory in its operations, partly because of the nature of ownership and decision-making architecture of CCUs.

Generally, however, further analysis indicates[55] that out of the 120 respondents across all three institutions (SAT, CCU and SRB), only 19.2% and 17.5% of males and females respectively had high participation in the design processes of interventions. However, the breakdown[56] among the various MFIs shows the following in terms of high level of participation between males and females: SAT – 14.3% (males) and 10.7 (females); CCU – 23.8% (males) and 33.3% (females); and lastly SRB – 18% (males) and 8% (females). The analysis concludes that CCU had a significant number of female involvements in the design processes at a high level; with the opposite being the case for SAT and SRB.

Another trend observed among some of the rural communities was that female groups were managed by a few (semi)literate executives. These executives were the official mouthpiece and responsible for making critical decisions on behalf of the group. This could explain the relatively smaller numbers of females involved in the design processes as compared to their male counterparts. However, the sociocultural system of patriarchy in Northern Ghana could also be the reason for the relatively low and no involvement of females in the product design processes. The possible danger of elite capture by a few literate women

[55] See table 2 in appendix 1 for analysis.
[56] See table 3 in the appendix for analysis.

executives in groups and the sociocultural obstacles that inhibit women's participation need more critical attention from MFIs.

An additional chi-square test of association also shows evidence of a relationship between clients' level of participation and the financial institution they belong to (chi-square = 15.649, df = 4, p <0.01)[57]. From the above analysis, inferences can be drawn to the effect that clients with CCU have a better chance of being involved in the design processes than their counterparts in SAT and SRB.

Table 5.7 Clients' participation in the design processes of interventions[58]

MFI		Frequency	Percent	Cumulative Percent
SAT	High Participation	7	25.0	25.0
	Low Participation	6	21.4	46.4
	No Participation	15	53.6	100.0
	Total	28	100.0	
CCU	High Participation	24	57.1	57.1
	Low Participation	11	26.2	83.3
	No Participation	7	16.7	100.0
	Total	42	100.0	
SRB	High Participation	13	26.0	26.0
	Low Participation	17	34.0	60.0
	No Participation	20	40.0	100.0
	Total	50	100.0	

Source: Fieldwork Data (2017)

The study interviewed clients on their involvement from the inspiration[59], ideation[60] and implementation[61] stages of interventions. This qualitative aspect of the analysis is vital in getting better understanding of the actual stages clients are involved in an intervention. The study believes that seeking clients' insights from the inspiration, ideation and implementation stages of interventions is a person-centred approach and helps to incorporate the needs of services users (Mattern and Tarazi 2015).

[57] The Pearson chi-square was = 0.004, this is less than 1% and 5% significance levels. See table 1 in appendix for further analysis.
[58] Ranking and analysis of the levels of participation was done following (Arnstein 1969).
[59] The inspiration stage is viewed as the initial conceptualisation process of the intervention and usually entails service providers interviewing and observing clients and other stakeholders to build a strong understanding of their needs and desires.
[60] The ideation stage involves synthesising the key learnings from the lived experiences of clients and other stakeholders to generate ideas and refine solutions for better financial portfolios.
[61] The implementation is always the most critical stage to both clients and providers. It involves a market strategy on how to introduce the products designed to prospective clients.

The study conducted a couple of interviews and FGDs with clients to unravel whether their needs and inspirations remained central throughout the design stages of the interventions. Regarding the inspiration stage of the intervention, the study recounts the following perspectives, indicated by interviewees regarding their involvement in the design of products. Interviewees were asked whether MFIs sought their inputs and aspirations in designing products to implement for poverty reduction.

Some clients with SAT, CCU and SRB had the following to say regarding their participation:

> No, since we joined the SAT with our group (Trust Bank) they (SAT) have never come to ask for our views about how any of their interventions or products should be designed and implemented. We have a lot of concerns and insights about our community that we want SAT to include in the products. However, from the look of things, our ideas do not matter to the officers that come Jirapa town [i.e. where the Municipal office for SAT is located]. I can recall when they first came to us [on our village market day], all they did was to inform a couple of other women and me about their group loans and credit scheme. They said that anyone interested in joining should write down their names with Madam Faustina Bayuo (local church treasurer). Honestly, we did not have any detailed knowledge of the nature of products and how they were going to be operationalised. They just informed us we save with them and access loans from our savings to support our trade (Client, SAT).

> The officer responsible for this community asked the other vegetable farmers and me to form groups and nominate our executives. The officer said they (SRB) could give us loans to support in our farming and we pay back when we harvest and sell our tomatoes and pepper. No one came to talk to me or anyone of group members regarding our farming activities [when we sow, apply fertilisers when we harvest and the nature of the market after harvest]. If you talk to my other colleagues, they might tell you we did not even know how much we will get a loan and the repayment arrangements. We now face the challenge of repaying loans because they expect us to start repayment immediately when we start harvesting. You know, the prices at that time are usually awful for us. We do not get any profits with such arrangements. We have told our executives to discuss this issue with SRB to help include our current desires in their interventions. Else, the current arrangement means we are just working for SRB and not improving our lives (Client, SRB).

> We are members of the CCU, and we have a stake in how its things are operated. Before I joined and later became a member of a group, the manager visited us in our community to find out what our needs were, and how they could partner with us to address them and grow with us together. I think the CCU is for us [the poor], because, no matter how much you save with them, you also have a say during the annual

> general meetings. We allowed airing our views and as well as making suggestions to be taken on board in future interventions. Because being a cooperative society, they have a good working relationship us and know our challenges. The manager himself sometimes visits us at our place of business to find out about operations (Client, CCU).

Additional FGDs with SAT clients who indicated they had a high level of participation in the design of interventions mostly agreed that the scale of their investment was a reason for their involvement in the design processes. They further added that most of the interventions or products they had were personalised primarily to meet the scale and nature of their investment. In effect, most of the investments they stated were into the purchase of heavy-duty agricultural equipment such as farm tractors. This observation was found to be the case with a minority of SRB clients, where wealthier clients were more involved in the design processes of personalised interventions.

In a nutshell, unlike the operational model of CCU, the interventions from SAT and SRB were introduced in all the implementing communities already designed and poised for implementation. The study's findings are consistent with the shared opinion that MFIs are noted for leaving out end users from the design and implementation of poverty reduction interventions, further entrenched by the current commercialisation drive of the microfinance market (Pitamber 2003).

On the part of SAT, staff members explained that it was challenging to include the specific needs and aspirations of their clients since the interventions were designed outside the study and standardised for all the implementation communities across the country.

To this end, the manager of SAT added it is much easier for management to monitor the performance and activities of clients if they are all on the same products and services. The staff of SAT also added that their interventions did not involve clients in specifying their individual and community characteristics because all their operations needed to be structured in line with the organisation's financial management software.

On the part of SRB, the staff members of the project management unit (the office responsible for microfinance operations) added that their institution is a rural bank that provides services like the conventional banking sector. Providing microfinance services to meet the different needs and aspirations of end users would mean getting different authorisation from the board of the bank to implement them. However, the manager added that clients who required substantial amounts of credit could have a customised intervention to suit their needs.

However, why are financial service end users' views and perspectives omitted in SAT and SRB interventions? Contrary to the institutional views expressed by the staff, Yeboah (2010) suggests that the lack of involvement of clients in the design processes of products is because it is believed that designing financial portfolios is too complicated for rural end users to comprehend since they are mostly poor and have little to no formal education.

Nevertheless, the study discovered that even when a few poor clients have been involved in the product design process, such involvement has been limited to the implementation stage. The nature of the product design processes in both SAT and SRB represented a top-down approach. This meant that the power to determine the nature/features of the products rested in the hands of the top hierarchy of the institutions, and a few wealthier borrowers. Poorer clients were seldom involved throughout the various stages in the product development – inspiration, ideation and implementation of the product.

An essential finding established was that SAT and SRB mostly involved their clients at the implementation stage. It has been observed that in many developing countries, the idea is to replicate microfinance operational models across different communities without any critical attention to the heterogeneity in the needs of clients (Johnson and Rogaly 1997; Burkett 2007).

The lack of participation of clients in the product design processes led to the MFIs designing products based on the assumption of the needs of their clients that usually differ from the reality on the grounds. This has contributed to some mismatch between the products offered and what is needed by clients. For example, SRB staff assumed that providing credit to vegetable farmers in the Ping, Chaperu and Hain communities would improve their business performance and ultimately ensure timely repayments of loans.

However, such assumptions fail to acknowledge other contextual issues and challenges faced by clients in the rural agricultural value chain. Such contextual issues and challenges are better understood by clients themselves. As a result of this mismatch, clients were limited in their ability to reap the full economic potential of their activities. Kaplan and Mullainathan (2000) opine that the mismatch between the microfinance loan repayment schedules and the livelihood income sources of clients tend to undermine the poverty alleviation implications of microfinance interventions.

Two significant issues can be attributed to these findings in this section. First, non-participation of the clients in the design of products and implementations might have occasioned the failure of SAT and SRB to tailor their services in line with the poverty context or needs of clients (see table 5.2). Second, lack of involvement of clients' limits MFIs' understanding of the financial lives of their clients. This further undermines financial service providers' capability to provide appropriate financial tools required to address their livelihood shocks and vulnerabilities of their clients (see table 5.5). The work of Schneider (1997); Dittoh (2008) supports that microfinance products need to be designed to reflect the poverty context, needs and constraints of clients and their communities to be useful for poverty alleviation.

5.4 How are group-based activities structured in SRB, SAT and CCU to target and meet the needs of the poor?

The advent of group liability in microcredit operational models purports to build solidarity and members to help improve loan repayment rates through peer screening, monitoring and enforcement. This aspect of the study delves into how MFIs design and implement group-based products, taking into account group formation, peer-monitoring and support.

5.4.1 Group formation

In credit markets, selecting a creditworthy borrower can always be a difficult task, as there is a tendency for adverse selection of applicants due to asymmetric information (Stiglitz 1989). However, with this arrangement, a borrower's affiliation with a group is a necessary condition for accessing credit from an MFI. The work of Ghatak (1999a) summarises that peer-selection at the initial stage of the loan contract helps to reduce the problem of adverse selection before the investment period (loan given out by the lender). Ghatak (1999b) argues that by using an 'assortative matching process', groups can 'self-select' borrowers (members) that are less risky, hence, directly helping to reduce moral hazards; lowering the interest rate charged by lenders and consequently resulting in a 'Pareto superior outcome' compared to individual lending.

Despite the arguments in favour of group-lending models, it is, however, not without operational issues that affect its effectiveness as a means of targeting the poor in society. Group-lending is linked with groups incurring additional costs in the formation and training of members, as well as cost supervision and frequency of instalment payments (Savita 2007). Other criticisms stem from the fact that the joint liability model of lending can be punitive to good credit risk members of the group Giné et al. (2010), as it deters such clients from making optimum utilisation of credit (Madajewicz 1999). It could also threaten loan repayments since the motivation of future credit is no longer present if one member fails to repay (Besley and Coate 1995).

In less ethnically diverse communities, group-lending based on self-selection can be socially exclusionary to people from minority groups or caste (Greeley 2005); in these circumstances, staff support from the MFIs in the formation is necessary (Sinha 2009). Table 5.8 below is a quantitative analysis of the group formation strategies that were used in clients' groups. The qualitative discussion that follows gives further service user perspectives and MFI staff justification for the preference of a strategy in group formation.

Table 5.8 Group formation strategies

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Peer-selection	13	46.4	46.4
		NGO Support	2	7.1	53.6
		Existing Group	4	14.3	67.9
		Formed by MFI	9	32.1	100.0
		Total	28	100.0	
CCU	Valid	Peer-selection	7	16.7	16.7
		NGO Support	21	50.0	66.7
		Existing Group	9	21.4	88.1
		Formed by MFI	5	11.9	100.0
		Total	42	100.0	
SRB	Valid	Peer-selection	14	28.0	28.0
		NGO Support	9	18.0	46.0
		Existing Group	7	14.0	60.0
		Formed by MFI	20	40.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The analysis in table 5.8 above indicates that 46.4% (SAT), 50% (CCU) and 40% (SRB) of clients used peer selection and NGO support, and were formed by MFI respectively as the most used strategies in group formation. An additional chi-square test of association also shows that there is strong evidence of a relationship between a group formation strategy used by clients and the financial institution involved (chi-square = 26.667, df = 6, p <0.01)[62]. That meant that some MFIs placed a premium in the formation processes of their groups as a guaranteed way of extending financial services to members.

There are widespread arguments in support of peer selection in joint-liability lending, as such a model helps to circumvent both ex-post and ex-ante moral hazard associated with wrong selection (Stiglitz 1990; Ghatak 1999; Armendáriz de Aghion and Morduch 2000).

However, when asked why they preferred peer selection of group members in forming their Trust Bank, some interviewees from SAT made the following comments:

> We do not want to include someone who would be a financial burden to us when he/she defaults in loan repayment. We are also interested in someone who is understanding [not quarrelsome] and will always attend our group meetings. That is why we always want our group members to vet new members (Matilda Kabir, Client, SAT).

[62] See table 4 in the appendix for analysis.

> We were told that if we formed a group, they were going to give us access to loans. So, we came together (we all belong to the same church association) as suggested by SAT. However, since then, it has been difficult to access credit through the group if you do not have enough savings (SAT, Client[63]).

Further interviews revealed that despite the creation of groups (Trust Banks), accessing loans remained a challenge for members. Some clients of SAT indicated that a member could only access credit if the member had substantial amounts of personal savings, however, it was also revealed that the Trust Banks established by SAT were used to facilitate deposit mobilisation through a compulsory savings scheme. A compulsory savings scheme differs from voluntary savings in that borrowers can only access credit if they meet a compensating balance condition (Ledgerwood 2014).

Nevertheless, some Trust Banks members that managed to access credits bemoaned the high interest rates and service charges they have had to endure. One client further added that a member could lose their deposits/savings once they defaulted on one regular periodic payment. One SAT client had this to add:

> The little savings I have with my Trust Bank [she goes on to show the researcher her deposit book] that is what I am keeping supporting my son's education. I could not go to school, so I do not want him to drop out because of money. Because of that, I do not want to lose my savings because of a loan (Agartha Aryuo, SAT).

The lack of finance is only one aspect of what it is to be poor. Households or clients like Agartha Aryuo face the daily challenges of poverty without adequate or better financial tools to help address them. The work of (Collins et al. 2010: 174-175), captures this narrative quite accessibly saying:

> When incomes are small, tools to manage income well become vitally important. The money that the poor earn too often arrives at the wrong times, can be hard to hold onto and is difficult to build into something larger through borrowing and savings. This is the fundamental tragedy of poverty as seen through a financial lens: the triple whammy of incomes that are both small and uncertain, with contexts where the financial opportunities to leverage and smooth income to fix expenditure are extremely limited (pp. 174–175).

Curiously, these counter-evidences put forward by clients defeat the theoretical underpinnings of joint liability. It is inconceivable to understand why interest

[63] Name has not been displayed because client wanted to remain anonymous.

rates on group loans remained high despite the joint-liability arrangements evident in groups. The insistence on deducting loan instalments from clients' deposit balances is counterproductive, as it does not support building assets and capital formation through savings. This suggests that Trust Bank members with little or no savings capacity are excluded from credit interventions.

However, is it true that SAT's Trust Bank targets the poor and aims to reduce poverty as indicated in their prospectus? Interviews with staff members revealed that the SAT did not explicitly target the poor. The manager of the SAT had this to say regarding SAT's implementation:

> Most of our clients do not know that our institution has two components (SAT and SASL). SAT is supposed to be the NGO version of the institution while SASL (Sinapi Aba Savings and Loan) is the commercial wing (Manager, SAT).

All the group loan activities of SAT were operated with the commercial wing (SASL) even when clients thought they were under SAT. The manager added that group loans were not performing as well as they used to do because of the difficulties in bringing people together to form groups. Challenges such as regular meetings and the frequent nature with which members needed to make instalments towards loans were a disincentive for group-based lending.

On the part of the SRB, the group formation strategy was generally used based on the institution's policy on organising its joint-liability groups. The staff of SRB explained that they asked people who were interested in the intervention to write down their names, stating the nature of their business and location. The SRB project office organised the groups and assisted them in selecting their leaders.

Unlike the SAT where peer selection was used, SRB used a non-self-formation of the group to organise its clients. The manager of the project management unit explained the reason for using this method, stating that putting people from different socioeconomic backgrounds and business in a group helped to manage covariate risk and ensure that clients who were better off served as a cushion to the poorer ones. Mosley (1996), in a study on group lending in Bolivia, confirmed that there was a much higher possibility that members of a joint-liability group assisted their colleagues when the socioeconomic characteristics of the group were more heterogeneous. The work of Karlan (2003) found a similar strategy used in group formation by FINCA in Ayacucho in Peru.

In the case of CCU, groups were formed with help from the International Development Enterprises (iDE) – an international NGO with projects in the locality. At the time of this research, iDE was helping rural households gain access to a sustainable livelihood in agricultural productivity. As an entry point strategy, iDE sought to provide agriculture extension services to rural farmers to help them determine best practices in farming, especially in this era of climate change and its accompanying vulnerabilities. However, iDE realised that rural agricultural productivity was constrained because of lack of credit, thus the need to link rural farmer-groups with credit lines under joint liability.

A field coordinator who supported the group formation efforts with iDE had this to say:

> When iDE started the intervention with the formation of groups, we had an agronomist who took members through a series of training on what can be grown and at what time to plant their crops. We also faced the problem of credit because these farmers needed fertilisers and other inputs. The development finance landscape at the rural level meant that our options were limited to only the SRB and CCU. The CCU agreed to lend to our groups at a lower interest rate (Desmond Yesseh, iDE).

In an FGD with some CCU clients, they unanimously agreed that iDE had played a significant interfacing role in providing joint-liability loans from the CCU. The secretary of one of the groups, into vegetable farming in Chapuri, had this to say:

> Both iDE and CCU have been supportive of our group in having access to credit to purchase various farm inputs, which hitherto was our major problem. The training iDE offered to our group made us understand how to enhance soil fertility at our farms. During the training, those of us who thought we could work together as a group and shared similar farming practices formed a group (Service User, CCU).

However, despite the gains chalked up by these groups formed under iDE supervision and training, not all clients could be covered under this intervention. The manager of CCU added that even though the iDE[64] groups were mostly

[64] The operations of iDE in the region have since ended. The manager of CCU indicated that groups created during iDE's operations are still being given credit.

successful with about 99% loan recovery rate, it was difficult to scale up the same model due to capacity constraints.

However, some SRB clients indicated that the current arrangement of putting people from different socioeconomic clusters into one group served as a disincentive to the more impoverished borrower. One group member of SRB remarked that:

> The amount of loan I usually request is small as compared to some of our members who need more money for their businesses. Because some of our members take more significant loans, as for me, that is a disincentive to me. I do not want to be charged to support someone who is richer than me (Kojo Kpan, SRB, Hain).

As a rural bank, SRB endorses the traditional system of patriarchy practised in Northern Ghana, and particularly in the Jirapa municipality. Some interviewees with SRB, particularly women and younger clients, recounted the initial membership registration where they seek approval to join the group from their spouses or a male household head. Those who failed to get approval from their male partners were dropped.

> When SRB announced this intervention during a Sunday Mass service, many women came to write down their names, but some of them were subsequently dropped because their husbands did not allow them. Accordingly, they said their husbands did not want to face the embarrassment of a debt default (SRB, Client).

Summing up, all three institutions (SAT, CCU and SRB) present different pieces of evidence of the effects of joint liability to their clients. Contrary to Ghatak (2000) who states that credit-based contracts under joint liability persuade peers in the group to self-select and monitor loan use, analysis from the empirical data from the field suggests that clients may not have any influence on how their group is formed (in the case of SRB).

The strategy of combining more affluent borrowers with poorer ones to manage covariate risk may appear theoretically sound but empirically problematic to ensure the functionality of other aspects of joint-liability contracts. For example, power relations created as a result of combining richer and poorer borrowers might make it difficult for the latter to monitor and mount pressure on the former to eschew moral hazards with borrowed funds.

The interview with the SRB service user (Kojo Kpan) as chronicled above, is an indication of a disincentive group formation strategy could be presented to needy borrowers. In the case of SAT, the group formation strategy was led by the peers under already-designed intervention consistent with the organisation's motives of sustainability with little-to-no influence from clients on their needs.

As such, the insistence on clients to make compulsory savings to be eligible for loans within their groups defeats the rationale behind group formation and joint-liability lending. Consistent with some shared opinions by both clients of SAT and SRB, and confirmed by the staff of the former, joint-liability loans are on a decline in the study area with some blaming this on the structure of the design. These findings appear consistent with De Quidt et al. (2018a), where they make an empirical argument suggesting an evident trend away from joint liability in recent times, due to commercialisation and increased competition in the microfinance industry.

The following sections discuss in detail the implications of the current group-lending mechanisms for peer monitoring and pressure, as well as support for group members.

5.4.2 Peer monitoring and pressure

Peer monitoring[65] and pressure cover activities involved in the investment stage, taking into consideration the problems that come along and how joint-liability clauses in loan contracts help to mitigate such problems. At this phase of the lending process, the creditor is faced with the challenge of ex-ante moral hazard. This type of moral hazard arises when the borrower decides to commit the borrowed funds into risky investment projects, misapplies credit or is negligent in the management of borrowed funds. In theory, however, ex-ante moral hazard-related problems can be resolved through peer-monitoring of the investment activities of group members augmented by staff monitoring (Simtowe et al. 2006).

However, the business of ensuring that loans are repaid within the schedule to enable the continuity of further services is vitally important at this point. The

[65] Peer monitoring refers to the ways through which the group members observe their peers to ensure that loans will be repaid.

study sought to establish the degree to which peer monitoring was used as a strategy to check loan use and guarantee loan repayment on schedule.

In principle, the staff of all three institutions expected the peers in the various groups to perform a monitoring responsibility, and indeed they all did confirm in separate interviews that group members did perform the task of monitoring loan uses to expectations. The following quantitative analysis sought to establish whether clients knew about the use of peers' funds.

Table 5.9 Knowledge of other members' use of funds

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	No	18	64.3	64.3
		Yes	10	35.7	100.0
		Total	28	100.0	
CCU	Valid	No	13	31.0	31.0
		Yes	29	69.0	100.0
		Total	42	100.0	
SRB	Valid	No	36	72.0	72.0
		Yes	14	28.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

Theoretically, effective peer monitoring presumes that members know of their peers' uses of loans. The analysis suggests that a majority of clients for SAT and SRB did not have any knowledge of how their group members used their loans.

In table 5.9 above, 64.3%, 31% and 72% of SAT, CCU and SRB clients respectively mentioned they did not know how their group members used their borrowed funds. It appeared that a majority of clients of CCU knew what their group members use their funds for, because of the nature of training given to them prior to the formation of the groups. Group members were trained by iDE staff and encouraged to support each other in their livelihood activities to guarantee high loan recovery.

Chi-square analysis also established some evidence[66] of a relationship between the status of locality[67] and clients' knowledge of their members' uses of their loans. The analysis further established that about 51.7% of rural clients

[66] Significant only at 10% ($p < 0.10$), with a df=1 and chi-square=2.737. See table 6 in the appendix for analysis.
[67] Status of locality for the purposes of the study is categorised into rural and urban.

indicated they knew about the loans of their peers. In contrast, only 36.7% of urban clients said they knew how their colleagues used their loans. Contrary to existing evidence (Stiglitz 1990; Laffont and Rey 2003) that group formation under joint-liability contracts helps institutions circumvent ex-ante and ex-post moral hazards through peer monitoring and pressure, the study found no evidence[68] of any relationship between group formation strategies of SAT, CCU and SRB, and their clients' knowledge of how loans are used.

Nonetheless, what could have accounted for the clients' lack of knowledge of how their peers used their loans? Some interviewees had this to say regarding the lack of knowledge of how their group members used their loans:

> In our group, members apply for loans depending on the amount of money he/she has in her savings, as a guarantee against loan default. Under such an arrangement, it becomes intrusive for a member to demand knowledge of how someone uses his/her loan. It is personal (Abraham Dakurah, SAT).

> Has a poor man got a stronger voice in our society? [Interviewee quizzed]. No [she replied]. Because some of us get small amounts of loans in the group, we cannot monitor those who take more significant amounts. They will not even listen to you if demand information of their loan uses. That is why I said a poor person has no strong voice (Augustina Kolekang, SRB).

The nature of the design of group-lending contracts has implications for peer monitoring and the continuous demand for loans under joint liability. Clients of SAT and SRB stated during interviews that group loans were not attractive due to the changes in the eligibility criteria. In the case of CCU, the iDE[69] with requisite technical knowledge of rural livelihoods and agronomy provided support in the formation of groups that were later linked to CCU to finance their activities.

5.4.3 Peer support

It is believed that group-based lending under joint liability leads to the shared benefits of social capital in various socioeconomic forms among peers in the

[68] Chi-square=1.944, df=3, p >10% (0.10), hence the need to reject alternative hypothesis and accept the null hypothesis.

[69] iDE in time of their operations provided support to farmers through the formation of groups, creation of a business plan in line with development of their farming activities to improve their livelihood outcomes.

group. Culturally, most communities in the northern part of Ghana have a duty of support for community members, especially in times of social misfortunes, such as death. In the context of joint liability, peer support refers to how members with shared values and interests in a group serve as a support mechanism to each other to ensure prompt repayments of loans and in other social welfare-related issues.

Regarding the support members get from their peers in terms of aid towards loan repayment when the member is experiencing a hard time, it was not explicitly clear what form it takes. In general, most clients agreed that the support they get from their peers comes in the form of social support, such as donations during funerals and serving as a cushion against loan default by a member. Some interviewees from SRB and CCU mentioned the assistance regarding support from peers in servicing their loans.

However, some SAT clients indicated that they had no support from their group members, mainly because of their members' access to credit according to their savings capacity with the SAT.

> Our members make their periodic savings through our Trust Bank to SAT, so a member can only access credit based on your savings. The group is only used as a vehicle to mobilise savings and make loans accordingly. Once a member defaults in any regular periodic payments, a deduction is made from the savings, no member is held accountable (Service User, SAT).
>
> When someone within the group has a challenge regarding his family, we all know about it because we live in this community together. In such circumstances, we support the member at his farm or help pay an outstanding loan, we support him, and then he pays back later (Darius Bayalee, SRB).
>
> In this, our group, each woman here sees the other as a sister. We have a welfare account, where each member makes a little contribution to have meetings anytime. This account is meant to support a member when she is facing a genuine challenge in repaying a loan. We also strive to guard against misuse and abuse of this account (Lucy Maaltaa, CCU).

Table 5.10 below shows a quantitative analysis of clients' responses regarding the support they get from their various groups in their financial institution. The analysis reveals that only 35.7% of SAT clients indicated they got support from their peers in their various groups that aided them in loan repayment. However, about 64.3% and 68% of clients of CCU and SRB respectively mentioned they had support from their group members. The result from SRB's clients was not surprising since their joint-liability groups were formed by combining people from different socioeconomic clusters in each group to manage covariate risk. In the case of CCU, iDE supported in forming groups, taking into context the similarity of members' livelihood needs.

Table 5.10 Support from group members

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	No	18	64.3	64.3
		Yes	10	35.7	100.0
		Total	28	100.0	
CCU	Valid	No	15	35.7	35.7
		Yes	27	64.3	100.0
		Total	42	100.0	
SRB	Valid	No	16	32.0	32.0
		Yes	34	68.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

Additionally, chi-square analysis revealed strong evidence (chi-square=8.445, df=2, $p < 0.05$[70]) of a relationship between the financial institution (SAT, CCU and SRB) and the support clients get from their peers in groups. Additional analysis also revealed stronger evidence[71] (chi-square=15.211, Sig at 0.000) of a relationship between the status of the locality of clients (rural and urban) and the support they get from their peers in groups. Similarly, further analysis (see table 5 of the appendix) revealed that among all respondents that accessed some form of support from groups, 64.8% were found to be rural-based clients, while 35.2% were members of groups based in urban areas.

This result shows the potential to harness social capital from rural communities to benefit microfinance clients. The implication of these findings for product design is indicative of the need for financial institutions to develop different financial products and services concerning rural and urban contexts. Designing products that would rely on social capital to be useful might be better suited for rural communities rather than urban.

[70] Chi-square analysis showed a significance level of p=0.015, hence, the study rejected the null hypothesis and accepted the alternative hypothesis.
[71] See table 5 in the appendix for analysis.

5.5 How are individual credit programmes perceived and to what extent do their features reflect the livelihoods of clients?

Financial institutions should have a deeper understanding of the cash patterns of their clients in order to design credit products that meet their needs. The design of successful credit products that satisfy the needs of households is a necessity for any MFI that aims to have an impact on poverty reduction (Ledgerwood 2014). That, however, requires getting an overlap between customers' needs and the institutional sustainability of microfinance. In most jurisdictions, the reported evidence is that clients require appropriate loan amounts, loan terms, collateral and substitute requirements that suit their abilities and needs. Since the inception of microfinance, it has always been concerned with the provision of a variety of financial services in the form of loans, and lately, non-financial services in the form of training and health care to clients.

However, the nature and form of such credit interventions taken are vitally important in this regard. This aspect of the chapter puts forth a discussion that emphasises the need to design lending products to meet the needs of customers, hinged on the understanding that households value access to lending products and behave financially well if they are treated as clients rather than as beneficiaries (Ledgerwood 1996; Prahalad 2012). This section assesses clients' access to loans, disbursement, loan amounts and repayment structure of loans in the three institutions under review.

5.5.1 Access to individual lending

Individual lending is an approach to providing business loans to micro-entrepreneurs. Clients access loans personalised to their needs rather than the conventional group-lending approach and give clients the flexibility needed to be able to derive optimal utility from such loans (Sebstad and Cohen 2001). Individual loans are mostly provided based on the borrower's ability to provide the MFI with some assurances and security that the credit will be repaid at agreed-upon terms. The characteristics of an MFI's lending model should not be repressive to the extent that it fuels exclusion. Table 5.11 below shows how clients perceive access to individual loans.

Table 5.11 Nature of access to individual loans

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Flexible	5	17.9	17.9
		Moderately Flexible	9	32.1	50.0
		Not Flexible	14	50.0	100.0
		Total	28	100.0	
CCU	Valid	Flexible	24	57.1	57.1
		Moderately Flexible	13	31.0	88.1
		Not Flexible	5	11.9	100.0
		Total	42	100.0	
SRB	Valid	Flexible	6	12.0	12.0
		Moderately Flexible	17	34.0	46.0
		Not Flexible	27	54.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The quantitative analysis of clients' perception of access indicates that only 17.9% and 12% clients of SAT and SRB respectively said it was flexible to access individual loans. However, about 57.1% of CCU clients said it was flexible to access individual loans. Some interviewees had this to say during follow-up interviews to ascertain the reasoning behind the perceived lack of flexibility or otherwise:

> It is challenging to access personal loans from SRB, especially when you do not have some specific assets to pledge as collateral. Sometimes, when you are in an urgent need of a loan, they [staff of SRB] will tell you to bring a professional teacher[72] as a guarantor. In Ghana today, no one would want to guarantee for you to take a loan if he/she is not a family member (Alexandra Balig, Ping, SRB).

> Sometimes you need an individual loan, different from what you get from the Trust Bank (group) to be able to take on another investment or address a household problem. However, the processes involved are always too complicated. Too much paperwork, they will tell to bring this document today and a different one tomorrow. Some of these documents, such as title deeds for lands, we do not have them (Emmanuel Balooro, Jirapa, SAT).

> Getting a loan from CCU has never proven to be difficult. When they initially introduced the CCU products to me, they said if one can put down GHs 20.00[73] as [seed money[74]], you become a member and qualify for small loans. It is flexible to get a loan (Georgina, Hain, CCU).

[72] The interviewee used this in reference to a salaried worker in the context of the rural community. In most parts of rural Ghana, particularly in the study area, one is likely to find only professional school teachers and health workers as the only individuals that receive a regular monthly salary from the government.
[73] This amount is equivalent to £3.13.
[74] The interviewee used seed money to mean initial shares to become a member of the credit union. The credit union movement strives on membership contributions in the form of shares.

The work of Duval and Waterfield (1996a) emphasises that the guarantees for individual loans in the form of collateral should be less stringent as compared to what is usually required by the traditional formal banks. Also, the terms and conditions of individual loans should be matched with the household or business needs. In the cases of SAT and SRB, there is a need for specific reforms in the design of individual credit products to give room for more flexibility in access.

However, in an interview with the staff of SRB and SAT, they indicated that those strict requirements during the process of accessing individual credit were to guard against loan default among clients. In this regard, both SAT and SRB – on account of structuring individual loans – place a high premium on institutional profitability rather than poverty reduction.

5.5.2 Structure of loan disbursement[75]

The disbursement of loans at the promised schedule and amount can bring significant improvement in the livelihoods of clients. When loans are disbursed at their earliest convenience, clients can plan their investments and structure appropriate repayments consistent with their inflows. However, for the poor service user, the nature of loan disbursements[76] does matter. Table 5.12 below shows clients' perceptions of the disbursement of loans.

Table 5.12 Is the schedule of loan disbursement consistent with livelihood cycle?

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	No	17	60.7	60.7
		Yes	11	39.3	100.0
		Total	28	100.0	
CCU	Valid	No	13	31.0	31.0
		Yes	29	69.0	100.0
		Total	42	100.0	
SRB	Valid	No	26	52.0	52.0
		Yes	24	48.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

This vivid explanation of shares as seed money is informative in that local people have contextual understanding of financial tools.

[75] When clients know precisely the time and nature of how loan funds will be given to them this may be vitally important to the borrower.

[76] Quite recently, some MFIs have resorted to disbursing loans in the form of kind (providing the needed assets) instead of cash; this is an attempt to address moral hazards in the use of loans.

The analysis in table 5.12 above suggests that 39.3%, 69% and 48% of SAT, CCU and SRB clients indicated that the schedules of loan disbursement were consistently matched with their livelihood activity cycle.

In effect, it appears that the majority of the clients of SAT (60.7%) and SRB (52%) found the disbursement loans to be mostly inconsistent with business cycles. Further chi-square analysis found strong evidence (chi-square=7.672, df=2, significance=0.02) of a relationship between the various financial institutions and the design of timely loan disbursements consistent with clients' livelihoods[77].

Some FGDs with SAT and SRB clients revealed overwhelming evidence that their financial institutions do not usually disburse loans at the crucial time they need them. The discussants added that because loans are disbursed quite late, it affects their agricultural productivity, as such loans are usually used to purchase inputs such as fertilisers. An interviewee further added that:

> Usually, the disbursements are done very late. When we sow our plants, there is a time we need to apply compound fertiliser (NPK[78]). When that era elapses without the farmer applying the fertiliser, you will not get a good yield (Vitus Langmal, SRB).

However, the reactions from the staff of SRB and SAT in separate interviews were mixed regarding reasons for the inconsistent disbursement of loans with the business cycles of their clients. Accordingly, the staff of SRB responded that they always strive to expedite loan disbursement to their clients, especially those who are farmers. However, they indicated that their outfit is caught in a fixed position on this matter since they would usually receive late loan applications from their prospective loan clients.

The manager of the microfinance and projects division of SRB had this to add:

> Most of our loan applicants are not proactive in securing the loans; they will usually wait till the last minute when they need the fertilisers or money to pay for tractor service before they come to us (Victoria, SRB).

On the part of SAT, the staff did say that not making loans available in advance to clients was a way to manage moral hazards. They added that when some clients are granted loans way in advance, they end up using them for

[77] See table 11 in the appendix for analysis.
[78] Nitrogen, phosphorus and potassium in a fertiliser.

consumption purposes, such as drinking and merrymaking during festive periods.

When clients were asked about the convenience in the method used in the disbursement of loans, some SAT and SRB clients indicated the methods were not convenient to them. Table 5.13 below depicts clients' perceptions of the nature of loan disbursement.

Table 5.13 Was the nature of loan disbursement convenient?

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	No	18	64.3	64.3
		Yes	10	35.7	100.0
		Total	28	100.0	
CCU	Valid	No	14	33.3	33.3
		Yes	28	66.7	100.0
		Total	42	100.0	
SRB	Valid	No	28	56.0	56.0
		Yes	22	44.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The analysis in table 5.13 above shows that about 64.3% and 56% of SAT and SRB clients respectively mentioned the lack of convenience in the disbursement of loans. While 66.7% of CCU clients answered that they experienced some level of convenience in the methods of loan disbursements.

Further investigation on this issue revealed that, in the case of SAT and SRB, some clients (mainly farmers) who needed farm inputs like fertilisers were not given the cash amounts of their loans, but instead they were transferred directly to the input suppliers. This arrangement made it difficult for these farmers to have immediate access to inputs due to logistical delays on the part of the supplier/seller. Additionally, the use of input suppliers based in urban areas also meant that rural farmers had to commute several kilometres on roads that are mostly not passable by motor vehicles.

5.5.3 Loan amount

The average size of loans disbursed by MFIs has always been used as a proxy for measuring the depth of outreach of microfinance interventions. Nevertheless, both clients and MFIs are equally concerned about the size of loans, with the former interested in the impact while the latter are focused on the sustainability of the enterprise (Schreiner 2001). Theoretically, loan amounts should be designed based on the cash patterns of the service user, such that the borrower can repay based on assessed inflows (Ledgerwood 2014).

In practice, however, most MFIs are also supposed to determine the size of loans to lend based on the stated intended purpose of the loan. Most clients in the study revealed that the amount of loan a client can access mainly depended on the value of savings rather than cash flows or the intended purpose of the loan.

Table 5.14 Last loan amount in (GHS)

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	</= 500	4	14.3	14.3
		501-600	5	17.9	32.1
		601-700	8	28.6	60.7
		> 700	11	39.3	100.0
		Total	28	100.0	
CCU	Valid	</= 500	18	42.9	42.9
		501-600	10	23.8	66.7
		601-700	8	19.0	85.7
		> 700	6	14.3	100.0
		Total	42	100.0	
SRB	Valid	</= 500	11	22.0	22.0
		501-600	12	24.0	46.0
		601-700	8	16.0	62.0
		> 700	19	38.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The analysis of the last loan amount a service user received showed most of SAT's respondents (39.3%) indicating they received above GHs 700 during their last loans. While about 42.9% of CCU's respondents said they received up to GHs 500 in their last loans and about 38% of SRB's clients indicated they received above GHs 700 as their last loan amount. There are arguments in the microfinance literature that suggest that a smaller loan amount could be a sign of outreach to the poorest of clients (Schreiner 2002; Cull et al. 2014). This argument is hinged on the fact that poor people usually cannot demand more substantial amounts of credits as compared to wealthy clients.

Further analysis also revealed there was no substantial evidence (chi-square=4.547, $p > 0.05$[79]) of a relationship between loan size/amount and

[79] The analysis showed a significance level of 0.208, as such, this was not significant to reject the null hypothesis that gender does not have a relationship with the loan size clients accessed. The study therefore rejected the alternative hypothesis. See analysis in table 9 of the appendix.

gender of the service user. This finding was quite surprising, as it contradicts evidence in the literature suggesting that women mostly take smaller loan amounts because they lack assets to pledge as collateral (Morduch 2000). Additionally, the study established that the size of loans a client can access depended mostly on the MFI. There was substantial statistical evidence (chi-square=13.056, df=6, $p < 0.05$[80]) of indicating a relationship between an MFI and the loan amounts their clients were able to access.

However, could these smaller loan sizes suggest that they were used for consumption purposes instead of for household investments? Evidence in the literature indicates that clients who take smaller loans most likely use them for consumption purposes rather than for household livelihood activities (Yeboah 2010). Clients confirmed during interview sessions that their loans were mostly used to support their farm or off-farm business activities but also sometimes used to address some household emergencies. They indicated that, even when credits were used to respond to household emergencies, the servicing of such loans were from their household business activities.

The manager of CCU added that:

> As a cooperative, we strive to reach most of our members (mainly poor) with a small loan amount to support their businesses. For borrowers that want more substantial amounts, our team will usually analyse the business prospects before making the loan (Manager, CCU).

In the cases of SAT and SRB, it was difficult for the study to ascertain whether the relatively large (>700 GH¢) amount of loans clients accessed meant poorer borrowers were systematically marginalised in the credit design of these two institutions. Some clients of both SAT and SRB revealed in separate interviews that they managed to secure relatively large loan amounts because of their ability to build up savings commensurate to their loan amounts.

[80] The significance level of the analysis was 0.042; this is significant at 5%. Hence, the rejection of the null for the alternative hypothesis that there is an evidence of a relationship between loan size and the MFI involved. See analysis in table 10 of the appendix.

5.5.4 Interest rate charges and other fees

The past decades have seen the commercialisation of microfinance institutions with the drive to make microloans, savings and insurance products to low-income clients in developing and transition countries. Most of the attention within this period has also been focused on how to make MFIs operate in a financially sustainable manner while charging interest rates that are adequate to cover all their operational costs (Rosenberg et al. 2009). They believe that doing so will allow for permanence and expansion of microfinance services to unreached communities with the tapped resources from commercial sources.

However, in addition to MFIs charging high interest rates (commercial rates to be sustainable), they also charge a fee when disbursing loans to their clients. These operational charges represent a further hidden financial cost to borrowers, though it is considered as a source of revenue to the MFIs (Ledgerwood 2014). These hidden fees and relatively high interest rates have also been a source of burden to many clients of MFIs, with some critics, such as Montgomery and Weiss (2011), questioning whether the commercialisation drive of MFIs could lead to the subjugation of their original objectives of poverty for profits.

During the fieldwork for this study, staff of the three institutions being studied were asked about their perception about interest rates and fees charged on their loans. Each institution claimed they offered the most competitive interest rates in the market, even though they failed to juxtapose their comparison with rates offered by the traditional banks. However, in some cases, the interest rates charged by these institutions far outweighed what formal commercial institutions charged. This practice defeats the very motive behind the establishment of microcredits, with Yunus (1998) saying traditional banks had “pronounced a death penalty on the poor” with their persistence in collateral security and high interest rates.

Regarding other charges, the study established that the three institutions all charged loan processing and insurance fees with the latter used to cover the remaining loan principal in the event of death or severe tragedy befalling the borrower. Clients interviewed on this issue complained of the effects of these covert charges and high interest rates on their businesses. For some SAT and

SRB clients, the relatively unfavourable interest rates charged on their loans, coupled with inconvenient loan disbursement schedules (see table 5.13) and unmatched repayment structure with their business cycle (see table 5.16) affected their ability to maximise the full utility of loans. Table 5.15 below shows an analysis of clients' assessment of the interest rates charged on their loans.

Table 5.15 How do you assess the interest charged on loans by MFIs?

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Favourable	7	25.0	25.0
		Moderately Favourable	8	28.6	53.6
		Not Favourable	13	46.4	100.0
		Total	28	100.0	
CCU	Valid	Favourable	22	52.4	52.4
		Moderately Favourable	12	28.6	81.0
		Not Favourable	8	19.0	100.0
		Total	42	100.0	
SRB	Valid	Favourable	12	24.0	24.0
		Moderately Favourable	9	18.0	42.0
		Not Favourable	29	58.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The descriptive statistics in table 5.15 above show that about 46.4% and 58% of SAT and SRB clients did say the interest rates charged on their loans were not favourable to their business and household activities. However, 52.4% of CCU clients indicated the interest rates on their loans were favourable. However, what could have accounted for the difference in perception of interest rates since all the institutions and their clients operated in the same financial ecosystem?

In responding to this polite query, the manager of CCU had this to say:

> The Cooperative Credit Unions, the world over, are formed on the foundation of solidarity and self-help. Our members come together; they pay an initial contribution, termed in our operations as shares. Once you are a member, you are entitled to all the services, including loans – at competitive interest rates (Manager, CCU).

In this regard, MFIs need to ensure that their operations are as efficient as practically possible in order not to mount an undue burden on their client through high interest rates and increased loan insurance fees. Ledgerwood (2014) is of the view that the cost of financing MFIs is usually low when financed through compulsory savings since the cost of credit for compulsory savings is minimal (as discussed later in table 5.19).

5.5.5 Loan repayment schedules

Generally, microfinance tools are relatively homogeneous and rigid. This framework fits well for maintaining low operational costs, enhancing clients' discipline and ensuring high repayment rates. Nevertheless, poor clients also need flexibility in financial tools, especially those that border on loan repayments (Laureti 2012).

The literature on microfinance loan repayment schedules has always hinged on contract theory (Varian 1990; Arnott and Stiglitz 1991) with leading debates torn between joint liability contracts and individual loans. The literature on this suggests that the former is more effective than the latter in ensuring loan repayments. However, with the gradual decline in joint liability contracts in the microfinance market due to increasing commercialisation (De Quidt et al. (2018a), there is a need for a new understanding of the design of repayment schedules as a component of the full loan product design process.

How do clients perceive the repayment schedules for the individual credits? Do loan repayment schedules match the business or household livelihood cycles? Table 5.16 below gives a short quantitative summary of service perception of the loan repayment schedule and their business cycle.

Table 5.16 Does loan repayment match with clients' business cycle?

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	No	18	64.3	64.3
		Yes	10	35.7	100.0
		Total	28	100.0	
CCU	Valid	No	8	19.0	19.0
		Yes	34	81.0	100.0
		Total	42	100.0	
SRB	Valid	No	28	56.0	56.0
		Yes	22	44.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The analysis in table 5.16 above shows that 64.3% and 56% of SAT and SRB clients did indicate that their loan repayment schedules were mismatched with their business or household livelihood cycle. Nevertheless, 81% of CCU clients confirmed that their loan repayment schedules were consistent with their business cycle.

Chi-square analysis was conducted to find out whether the design of the repayment structure of loans was associated with the various financial institutions. It was established that there was substantial evidence (chi-square=18.082, df=2, sig=0.00) of a relationship between the MFIs and whether loan repayment structures were matched with clients' business or livelihood cycles[81].

Nonetheless, what accounts for the mismatches in both SAT and SRB interventions? The staff of SAT and SRB had the following to say regarding this probing question:

> We structure our loan repayments in such a way that our clients start to pay little by little right up to the time of early harvest where they must make the full and final instalment payment (Clement Angbataayele, Field Staff, SRB).
>
> Most of the loan clients in this jurisdiction are nucleus[82] farmers. When we give them loans, we try to link them to off-takers or aggregators who would then buy the produce from farms directly at an already agreed-upon price. In this case, payments are made directly to SAT (Michael Adongo, Manager, SAT).

However, regarding clients' perceptions of the nature of the loan repayment schedule, a large majority of discussants during FGDs asserted that they would prefer more flexibility in the context of loan terms. There was a consensus among the discussants on the need to constantly take into consideration the changes that occur in clients' livelihood activities when determining the repayment terms for loans.

Some clients made the following comments on this subject matter in an interview session:

> The way and manner we expected to repay our loans with SRB are too rigid. We are supposed to repay the full instalment of our loan during harvest. You know at the time of harvest, the prices of farm produce are

[81] See table 12 in the appendix for the analysis.
[82] SAT description of smallholder farmers (farmers with farmlands ranging between 1–2 hectares).

> usually low because of high supply. In this case, we the farmers do not get anything [profits]. We cannot store our harvest for some time for prices to rise. It is like we are just working for SRB for free (Philemon Der-bile[83], SRB).

> As for the SAT, they are only interested in their money. They do not consider our plight. As soon as you harvest from the farm, they [SAT] bring the 'Waala women[84]' or some buyers from down-south to buy everything for them to get their loan money back. The price they give us is usually not reasonable, so sometimes the money you get is not enough to service the loan (Aabalakuu Festus, SAT).

> Regarding the repayment of our loans, each client has a different arrangement depending on their circumstances and the nature of their business. As a petty trader, there are periods I make enough money and sometimes, not so good. The staff of CCU understand the nature of my business and have decided to make my repayment arrangement flexible along with my business inflows. This arrangement allows me to manage my money well (Esther Yuokuu, CCU).

In all these discussions, the central thesis is that clients desire flexibility in financial tools used in interventions in both rural and urban settings. Flexibility does matter, either ex-ante, ex-post or full flexibility[85], there is a need to integrate clients' context in determining the loan repayment structure. In the case of SAT and SRB, repayment arrangements were made based on ex-ante flexibility and failed to incorporate some flexibility that reflects the clients' business cycles.

The findings on the issue of loan repayment schedules (in the cases of SAT and SRB) are consistent with Weber and Musshoff (2013) argument that, with agricultural microfinance, standard credits offered seem to be counterintuitive and perhaps counterproductive. That is because usually funded agricultural projects need adequate maturity periods before returns can begin to be realised.

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[83] An SRB service user living and practising mixed farming business in the Ping community.

[84] These market women from the Waala ethnic group in the regional capital of the Upper West Region, a region the study area falls under. In the local business parlance, these market women are viewed as price givers.

[85] With ex-ante flexibility transactions are adapted to each client's projected cash flows; while in the case of ex-post flexibility, transactions are contingent to states of world events, allowing for adaptation of transaction to actual clients' cash flows, shocks, emergencies and unexpected occurrences. However, full flexibility contracts do not predetermine transactions as is the case of both ex-ante and ex-post. Full flexibility gives a fixed amount and discretionarily decides which transaction to realise.

Some clients of the MFIs shared their lived experiences regarding how their livelihoods are adversely affected by the nature of mismatched loan repayment schedules with clients' seasonal income. According to Binswanger and Rosenzweig (1986), cash flows from the livelihood activities of most agricultural entrepreneurs are characterised by a high level of seasonality because of the periodical mismatches between expenses (planting season) and returns (harvest). Karlan and Mullainathan (2007) describe repayment schedules designed similar to SAT and SRB as having rigid flexibility. In the practice of matching transactions with clients' future cash flows, flexibility enhances poorer clients' capacity to manage their money (Laureti 2012). The work of Hickson (2000) also highlights the increasing importance clients ascribe to flexibility in the design of interventions but concludes that most MFIs usually fail to meet the necessary flexibility that their clients desire.

5.6 How are institutional savings programmes designed, and how do clients perceive them as a means of managing their vulnerabilities[86]?

The idea of savings in microfinance has recently been given colossal recognition, and the same emphasises as credit schemes. This new attention on savings comes at the height of the new trend of commercialisation in the microfinance sector. Savings support poor clients to adequately manage risks, develop household resilience and help minimise the likelihood of the chance of having to sell assets or resort to local moneylenders when faced with a crisis or other economic shock.

Most arguments in favour of savings in the literature of microfinance have always been viewed from the client and institutional perspectives. The first being that savings could well be a likely alternative to insurance for clients, i.e. the mandatory savings products that many MFIs incorporate into their operational methodology, serving as a cushion in case of a loan default (Dowla and Alamgir 2003). Most clients indicated that they have had to fall back on their savings during emergencies or when their households have faced shocks.

[86] Savings facilities and/or micro-insurance programmes can provide the poor with a means to reduce their vulnerability by managing risk and cash flow.

The second argument in favour of savings mobilisation is based on the premise that customers' deposits would enhance the institutional sustainability of MFIs that hitherto focused primarily on credit delivery. The work of Graham et al. (1984) suggests that the failure of credit delivery institutions to reach their optimal potential was fundamentally due to their lack of savings mobilisation tools in the rural financial markets. They conclude that rural financial institutions would be efficient in their operations if they mobilised their capital from voluntary savings of clients.

However, how do financial institutions mobilise deposits? Moreover, how are clients' needs reflected in the design of institutional savings products? All three institutions (SAT, CCU and SRB) did indicate that they mobilised clients' deposits primarily to be financially self-sufficient and able to create loan products for investment purposes.

The staff of the SAT added that their institution had in place both voluntary and compulsory savings products for different operational reasons. SAT's compulsory savings product is used as a precondition for clients to apply for loans and serve as a guard against loan default. According to SAT, voluntary savings from their clients also represented a source of investment capital for their institution. In an interview with the staff of SRB, the motives for mobilising deposits from their clients appeared similar to SAT.

The increasing interest in savings mobilisation among MFIs could be linked to their quest for financial and institutional sustainability following the decline in donor funding and subsidies (Al-Azzam 2019). In the case of SAT and CCU, savings products were designed to suit institutional motives rather than addressing the needs and aspirations of clients.

On the contrary, the CCU staff mentioned that because their institution was member-owned, services and products needed to mirror their unique aspirations and take into context the sociocultural dynamics of the various communities. The manager further added that their savings products were customer-centric and that they even had a family savings account product, where families could save the money received from their daughters' dowries.

This CCU example shows that MFIs need to integrate more of the sociocultural needs of their clients into the products offered.

The nature of savings products in rural financial markets should not generally be viewed as simplistic and mostly homogeneous across the board if they are to be useful tools for managing clients' shocks and vulnerabilities. In most cases, as evident in this study, clients have been inclined to use their savings, whether via formal or informal channels, as a response mechanism to household emergencies. The following discussions delve into the motives behind clients' savings and whether the design of savings products adequately addresses their needs and aspirations, especially in the context of asset accumulation and responding to household emergencies.

5.6.1 Why do clients save?

Savings is one area in the microfinance literature that has not seen the same level of attention as compared to credit. Poor people need a variety of flexible savings products for their varied livelihood activities, including managing their vulnerabilities. Table 5.17 below shows a quantitative analysis of clients' motives for saving.

Table 5.17 Why do clients save?

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	For HH Emergencies	15	53.6	53.6
		Payback Loans	6	21.4	75.0
		Business Expansion	3	10.7	85.8
		Buy Farm Inputs	4	14.3	96.4
		Total	28	100.0	
CCU	Valid	For HH Emergencies	16	38.1	38.1
		Payback Loans	4	9.5	47.6
		Business Expansion	9	21.4	69.0
		Buy Farm Inputs	7	16.7	85.7
		Safe Keeping	6	14.3	100.0
		Total	42	100.0	
SRB	Valid	For HH Emergencies	21	42.0	42.0
		Payback Loans	7	14.0	56.0
		Buy Farm Inputs	14	28.0	84.0
		Safe Keeping	8	16.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

As seen in table 5.17 above, clients do save and indeed have a variety of reasons for saving their funds with formal financial institutions such as SAT, CCU and SRB. Most of the respondents representing 53.6%, 38.1% and 42% of SAT, CCU and SRB respectively, indicated that they saved their funds with their financial institutions to address household emergencies. The other motives included the following respondents, 21.4% (SAT), 21.4% (CCU) and 27% (SRB), indicating they saved to pay back loans, business expansion and to buy farm inputs respectively. The analysis further illuminates that the poor do have the capacity to save and indeed do want to save for varied reasons, but that they lack adequate and flexible tools tailored to their cash flows and needs.

The apparent lack of financial tools designed to support households to respond to emergencies means clients across the three institutions were compelled to draw down their savings and borrow to do so. In effect, a large majority of clients complained of their inability to build up their assets stocks because they ended up using savings for emergencies purposes, such as illness or death of a household member. Interactions with clients revealed further that even when such household emergencies do not occur, some clients did not use their savings for investment purposes for fear of losing the protection they get from savings. Some clients had the following to say:

> As the breadwinner of the household, I save to help solve problems such as illness, death, poor harvest [you know problem are emergencies and are not always planned for]. So, I keep some money just in case anything happens (Dorothy Dong, SAT).

The apparent narrow nature of savings products available to clients makes it somewhat difficult for the poor to commit to different activities. They save for various purposes, either saving-up to guard against household emergencies or to buy farm inputs for the next season or saving-down to pay off debts owed.

In effect, the analysis of the lived experiences shared by clients revealed they expected more flexible and adaptable savings products to various needs. This argument has previously been mentioned by Rutherford (2009) that the demand for saving tools in rural financial markets has not been adequately matched by the supply of the same by clients.

A quick reflection on the above discussion leads to the question that, why do clients use their savings or loans (as previously discussed) to deal with emergencies when such decision can also represent a risk to the household? As discussed, the clients face several shocks and crises that are then addressed with varied strategies, including savings. However, with adequate financial designs, such as insurance, household emergencies could be well-addressed while safeguarding clients' savings for investments.

5.6.2 Convenience and flexibility of savings products

Clients place a high premium on financial products that are convenient, flexible and reliable to use in the rural setting. The study also examined clients' perception of the convenience, reliability and flexibility of savings products offered in the three interventions.

Savings products are viewed to be convenient when the processes involved in deposit collection and withdrawal are expedient to clients. Most clients consider the proximity to their savings institutions as convenient if they participate in multiples of financial intermediation. Table 5.18 below shows a quantitative analysis of clients' perception of the convenience of savings products.

Table 5.18 Clients' assessment of savings products regarding convenience

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Convenient	13	46.4	46.4
		Moderately Convenient	10	35.7	82.1
		Not Convenient	5	17.9	100.0
		Total	28	100.0	
CCU	Valid	Convenient	18	42.9	42.9
		Moderately Convenient	14	33.3	76.2
		Not Convenient	10	23.8	100.0
		Total	42	100.0	
SRB	Valid	Convenient	25	50.0	50.0
		Moderately Convenient	16	32.0	82.0
		Not Convenient	9	18.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The analysis in table 5.18 above revealed that 46.4%, 42.9% and 50% of SAT, CCU and SRB clients respectively indicated that they regarded their savings intervention products as convenient. Clients were satisfied with the fact that deposit collectors from their financial institutions visited them at home to collect the weekly or monthly savings. In the cases of SRB and CCU, clients expressed satisfaction in the setting up of an agency office near their communities, responsible for deposit collection and withdrawals.

However, regarding flexibility, some clients mentioned that they did not consider the savings products currently offered as flexible. Flexibility refers to the relative ease in reconciling clients' financial transactions with cash flows from their livelihood activities. In the context of poor rural households that perform day-to-day money management in the form of savings, flexibility in the amount and frequency of transactions is of the essence so that poor clients can transact in any amount and time (Collins et al. 2009; Karlan and Linden 2014).

Some service clients interviewed considered the weekly savings commitment as rigid as it mounted pressure on clients to make deposits even when they may be low on cash at the time of the visit of the deposit officer. Some clients had the following to say regarding the flexibility of savings products:

> The savings product offered by SAT is compulsory if you want to access credits with them. I am compelled to save because I need to build up to an amount to qualify for a loan amount. Accessing a loan should not be preconditioned to compulsory regular savings (Alex Tuori, SAT).
>
> The challenge with the current savings product of the credit union is that they do not have specific savings products designated for specific emergencies[87], such that members can make little contributions tailored to any household risk (Mathew Ziniyele, CCU).
>
> Saving with SAT is good because it helps clients manage their cash well instead of spending it on unimportant things. However, the problem is sometimes you must borrow money from someone to meet the weekly savings commitment because the deposit collector usually travels from the city [Jirapa] to my community (John Mwin-dery, SRB).

Flexibility in financial products (savings or credits) does matter. The various lived experiences shared by clients on this issue of flexibility of savings products reinforce the previous empirical work on the same subject matter. Brune et al.

[87] The interviewee was referring to a form of general-purpose insurance policy that allows members to make small regular premium payments towards a selected household emergency or risk from the general list of insurable risks.

(2011), in a field experiment with Malawian farmers, established that the take-up of either regular or commitment savings accounts was the same, but there is much higher take-up with substantial increases in deposits for simple and flexible savings accounts that were designed without commitments.

As was observed in the case of the three interventions, particularly in the cases of SAT and SRB, clients need savings tools that are consistent with their cash flows. Contrasting clients' desires for regular and commitment savings products are compelling in this context as it allows for gauging products that settle between behavioural constraints and loss of liquidity by clients. In effect, the work of Brune and colleagues concludes with their finding that clients with both regular and commitment savings products instead preferred the former to the latter.

5.6.3 Interest received from savings

The debate on interest rates in microfinance has always been biased towards credit with limited attention given to savings. Since both savings and credit play a vital role in the financial lives of clients, there is a need for some form of thoughtfulness regarding the interest income on deposits. That would serve as an incentive to spur on the ethos of savings among clients, especially the rural people. The net interest spread in most financial institutions is significantly large, but this is further overstretched among rural financial institutions. Table 5.19 below is an analysis of clients' assessment of the interest paid on their deposits by their respective service providers.

Table 5.19 Clients' assessment of interest on savings/deposits

Name of Financial Institution			Frequency	Percent	Cumulative Percent
SAT	Valid	Satisfactory	3	10.7	10.7
		Moderately Satisfactory	8	28.6	39.3
		Not Satisfactory	17	60.7	100.0
		Total	28	100.0	
CCU	Valid	Satisfactory	4	9.5	9.5
		Moderately Satisfactory	8	19.0	28.6
		Not Satisfactory	30	71.4	100.0
		Total	42	100.0	
SRB	Valid	Satisfactory	4	8.0	8.0
		Moderately Satisfactory	11	22.0	30.0
		Not Satisfactory	35	70.0	100.0
		Total	50	100.0	

Source: Fieldwork Data (2017)

The analysis in table 5.19 above indicates only 60.7%, 71.4% and 70% of SAT, CCU and SRB clients respectively were not satisfied with the interest income paid on their deposits. Most clients complained about the fact that they have had to pay high interest rates while receiving little to none on their savings accounts.

Some clients had the following to say on the structure of interest rates, particularly on deposits:

> They do not pay anything on our savings; even if they do, it is insignificant. They take our deposits, invest it in profitable ventures and pay us little. They need to increase the interest they pay on our savings (Augustine Maalkunuba, SAT).

Quite importantly, it has been observed in the study area, especially among clients interviewed, that poor households desire competitive interest rates on their deposits. That was self-evident when some clients admitted they have had to save their funds with some companies that promised high returns which they later realised were pyramid schemes.

5.7 Chapter summary

This chapter delved into how microfinance products are designed and implemented for poverty reduction from the perspective of clients and MFIs. From the perspective of clients, it discussed contextual issues and agreed that the difference in clients' household and community characteristics need to be taken into context in the product design processes. The poverty context of clients was also considered. The chapter emphasised that understanding clients' poverty context and their vulnerabilities would help MFIs design effective products that are responsive to clients' needs. They recognised the importance of taking into context livelihood assets and shocks, as well as the available coping mechanisms for shocks which helps to design appropriate financial tools for clients. The chapter also reaffirmed the importance of clients' participation in microfinance product design and implementation processes. The involvement of clients in the design processes ensures that crucial characteristics of microfinance products and implementation channels (individual loans, group-lending and savings) reflect the livelihood cycle, needs and poverty context of clients and their households.

CHAPTER 6

MICROFINANCE INTERVENTIONS AND IMPLICATIONS FOR POVERTY

6.0 Introduction

The theory of change that supports the development of microfinance is that access to financial services helps to reduce household poverty and helps households to manage their livelihood shocks. In the previous chapter, we examined how microfinance products and services are designed from the perspective of clients and service providers. This chapter analyses the poverty reduction implications of the microfinance products and services offered by SAT, CCU and SRB. The analysis takes into consideration how the products and services were designed and whether they reflected the needs and poverty context[88] of clients. It assesses the poverty reduction implications of the various contextual issues such as sociodemographic, business and livelihood characteristics of clients. Sociodemographic characteristics included the clients': gender, household size, nature of locality and occupation, while business and livelihood characteristics covered clients': sources of livelihood income, and the shocks and vulnerabilities associated with livelihoods. The effect of clients' participation in the product design processes on their poverty is also examined in this chapter. Lastly, it investigates the poverty reduction implications of the various features embedded in individual and group lending strategies, as well as the savings models used by SAT, CCU and SRB.

6.1 Does the consideration of contextual Issues in the design of financial products of clients have any implications for poverty reduction?

The above question aims to reveal knowledge of how contextual issues and the household characteristics of clients affect poverty, either at the household level or business level. The section also analyses and reflects on the poverty

[88] As argued in chapter five, microfinance tools would be useful in reducing poverty when contextual issues and the characteristics of service users reflect their needs and are designed to be fit-for-purpose.

reduction implications of interventions such as joint liability, credit and savings products.

6.1.1 Clients' locality and poverty reduction

Designing microfinance interventions that are fit-for-purpose depends on how reflective the features of these products and services are with the needs of individuals and their localities. Most localities (rural or urban) are different in various aspects of their livelihood activities, including the availability of livelihood assets and the unique vulnerabilities that affect the sustainability of their livelihood options.

The multi-faceted nature of poverty (rural and urban) makes it imperative for policymakers in the development spheres to address it at both the micro and macro levels and also from the local to global levels (Kumar and Mukhopadhyay 2013). The effectiveness of microfinance interventions depends on how consistent the design of products is with the needs of the various beneficiary units such as households, communities and localities.

The analysis in tables 6.1 and 6.2 below examines the contributions of microfinance interventions to clients' households and businesses across their various localities (rural and urban). The reason is to understand whether the design of microfinance products from the clients' contextual perspective (discussed in chapter five) has implications for poverty reduction. In this context, the study uses clients' assessments of the contributions[89] of microfinance to their households and businesses as a proxy for poverty reduction.

[89] Please see tables 6.14 and 6.15 for the various variable compositions for microfinance contribution to household and business outcomes respectively.

Table 6.1 Microfinance contributions to clients' household outcomes by status of the locality by MFI

Name of Financial Institution			Status of locality Rural	Urban	Total
SAT	Microfinance Contribution to Household Outcomes	Very Much	5(17.9)	3(10.7)	8(28.6)
		Somewhat	4(14.3)	8(28.6)	12(42.9)
		Not at All	5(17.9)	3(10.7)	8(28.6)
	Total		14(50)	14(50)	28(100)
CCU	Microfinance Contribution to Household Outcomes	Very Much	12(28.6)	9(21.4)	21(50)
		Somewhat	4(9.5)	7(16.6)	11(26.2)
		Not at All	7(16.6)	3(7.1)	10(23.8)
	Total		23(54.8)	19(45.2)	42(100)
SRB	Microfinance Contribution to Household Outcomes	Very Much	15(30)	2(4)	17(34)
		Somewhat	10(20)	12(24)	22(44)
		Not at All	5(10)	6(12)	11(22)
	Total		30(60)	20(40)	50(100)
Total	Microfinance Contribution to Outcomes	Very Much	32(26.6)	14(11.6)	46(38.3)
		Somewhat	18(15)	27(22.5)	45(37.5)
		Not at All	17(14.2)	12(10)	29(24.2)
	Total		67(55.8)	53(44.2)	120(100)

Source: Fieldwork Data (2017) *Note:* Percentages in brackets

How have MFIs contributed to clients' household outcomes across localities (rural and urban) under the current design of interventions? As a response to this inquiry, the study revealed that in the case of SAT, about 17.9%, 14.3% and 17.9% of their rural-based respondents indicated 'very much', 'somewhat' and 'not at all' respectively, as contributions from their financial institution.

In contrast, 10.7%, 28.6% and 10% of urban-based respondents indicated that the contribution of SAT towards their household outcomes was 'very much', 'somewhat' and 'not at all' respectively. Similarly, 28.6%, 9.5% and 16.6% of CCU's rural respondents mentioned they witnessed 'very much', 'somewhat' and 'not at all' contributions respectively, from CCU towards their household outcomes. However, 21.4%, 16.6% and 7.1% of their urban counterparts indicated they realised 'very much', 'somewhat' and 'not at all' contributions respectively.

In the case of SRB, 30%, 20% and 10% of rural clients interviewed for this study associated 'very much', 'somewhat' and 'not at all' contributions respectively to household outcomes. On the other hand, urban clients representing 4% (very much), 24% (somewhat) and 12% (not at all) allude to contributions towards their household outcomes. In all three institutions, the prevailing narrative that appears compellingly strong is that rural clients realised many more enhancements to their household outcomes as compared to their urban counterparts.

Table 6.2 Microfinance contributions to clients' business outcomes by status of the locality by MFI

Name of Financial Institution			Status of Locality: Rural	Urban	Total
SAT	Microfinance Contributions to Business Outcomes	Very Much	5(17.9)	2(7.1)	7(25)
		Somewhat	3(10.7)	7(25)	10(35.7)
		Not at All	6(21.4)	5(17.9)	11(39.3)
	Total		14(50)	14(50)	28(100)
CCU	Microfinance Contributions to Business Outcomes	Very Much	11(26.2)	8(19)	19(45.2)
		Somewhat	9(21.4)	6(14.3)	15(35.7)
		Not at All	3(7.1)	5(11.9)	8(19)
	Total		23(54.8)	19(45.2)	42(100)
SRB	Microfinance Contributions to Business Outcomes	Very Much	17(34)	5(10)	22(44)
		Somewhat	13(26)	10(20)	23(46)
		Not at All	0(0)	5(10)	5(10)
	Total		30(60)	20(40)	50(100)
Total	Microfinance Contributions to Business Outcomes	Very Much	33(27.5)	15(12.5)	48(40)
		Somewhat	25(20.8)	23(19.2)	48(40)
		Not at All	9(7.5)	15(12.5)	24(20)
	Total		67(55.8)	53(44.2)	120(100)

Source: Fieldwork Data (2017) *Note:* Percentages in brackets

Regarding microfinance contributions to business/livelihood outcomes, the analysis in table 6.1 above, revealed similar findings to the previous discussion on the contributions of MFIs to their clients' household outcomes. The statistical analysis showed that 17.9% of rural clients of SAT indicated they witnessed 'very much' contribution to their business, as compared to a meagre 7.1% of urban clients who mentioned the same.

Also, 26.2% and 19% representing rural and urban clients respectively said their businesses benefited 'very much' from the design of CCU's interventions. The findings from SRB were quite analogous to those of SAT and CCU, as a substantial number of rural-based clients (27.5%), compared to a meagre 12.5% of urban-based clients who mentioned that SRB's interventions contributed 'very much' to their businesses.

It was quite instructive from the findings that many urban clients in all three institutions stated that they did not realise any improvement to household and business outcomes from the microfinance interventions[90].

To further explore the disparities between rural and urban clients about their poverty outcomes, the study also calculated and compared the Multidimensional Poverty Index[91] (MPI) for clients of the two groups. Poverty is multi-faceted and therefore requires a multi-dimensional approach to understanding the different lived experiences of deprivations of people. The significance of the MPI in this analysis is to further give more empirical evidence to the existing differences in rural and urban poverty, and the need for different policy responses. Table 6.3 below, summarises the MPI of clients, according to their deprivation or otherwise across their localities (rural and urban).

Table 6.3 Clients' MPI by status of locality

			Locality		
MFI			**Rural**	**Urban**	**Total**
SAT	MPI	Not Deprived	7 (25%)	4 (14.3%)	11 (39.3)
		Deprived	7 (25%)	10 (35.7)	17 (60.7)
	Total		14 (50%)	14 (50%)	28 (100%)
CCU	MPI	Not Deprived	15 (35.7%)	14 (33.3%)	29 (69%)
		Deprived	8 (19%)	5 (11.9%)	13 (30.9)
	Total		23 (54.8%)	19 (45.2%)	42 (100%)
SRB	MPI	Not Deprived	17 (34%)	10 (20%)	27 (54%)
		Deprived	13 (26%)	10 (20%)	23 (46%)
	Total		30 (60%)	20 (40%)	50 (100%)

Source: Fieldwork Data (2017) *Note:* Percentages in brackets

The analysis on the above table reveals that 25% and 14.3% of SAT's rural and urban clients respectively were established not to be MPI poor (not deprived), whereas, about 35.7% (rural) and 25% (urban) were found to be MPI poor (deprived). In the case of CCU, about 35.7% of rural and 33.3% of urban clients

[90] The statistical details for this are as shown in tables 6.1 and 6.2, indicating that many urban clients (relative to rural clients) stated their financial institution was not contributing towards their household and business outcomes.

[91] The MPI was calculated from data collected from clients for three dimensions (Education, Health and Living standards), and ten indicators. The indicators are equally weighted and included: years of school and school attendance for the education dimension; child mortality and NHIS enrolment for the health dimension; and access to electricity, drinking water, sanitation, cooking fuel and assets ownership for the standard of living dimension).

were recognised from the analysis as not deprived, while about 19% and 11.9% of rural and urban clients respectively were found to be deprived. The MPI analysis for SRB also established that 34% and 20% of clients from rural and urban settings respectively were not deprived, whereas, 26% of rural and 20% of urban clients were MPI poor.

In all the above analysis, it is vital to emphasise that there are significant differences between urban and rural poverty. As such, the needs of both groups (urban and rural poor) are different and should be treated as such when designing microfinance and other social interventions. Nevertheless, often, the urban and rural poor have consistently been subject to the same product designs from MFIs (Kumar and Mukhopadhyay 2013). Anti-poverty interventions have primarily been focussed on rural communities with relatively little consideration for the poor in urban areas (Baker and Schuler 2004; Meng et al. 2005).

Several factors can account for the differences in urban and rural poverty, with most of these deeply rooted in the causes of poverty. In the context of this study, we argue that the poverty context of clients and the design of anti-poverty programmes should be linked (Hulme and Shepherd 2003; Stewart 2009; Hickey and Du Toit 2013). Having a one-size-fits-all approach to addressing poverty at both the rural and urban levels can be misleading.

This study found that there were different sources of poverty for rural and urban clients across the three MFIs under review[92]. For example, in the case of SAT clients, inadequate finance and poor soil fertility were the leading source of rural poverty, compared to lack of employment opportunities and market access which identified as urban sources of poverty.

Similarly, poor soil fertility was also found to be the cause of rural poverty for the majority of CCU clients while the lack of employment opportunities also caused poverty among urban clients. The picture was not any different in the case of SRB, where inadequate finance was observed as the leading cause of rural poverty, while insufficient funding and lack of employment opportunities equally affected clients’ poverty at the urban level.

[92] See table 1 in the appendix for detailed analysis on the different causes of poverty at the rural and urban levels.

However, substantial discourse is beginning to emerge on the conceptualisation of poverty and various approaches to poverty reduction. For example, the work of Naab et al. (2013) emphasises the need to safeguard urban agricultural land as a strategy of addressing urban poverty following the increasing trends and threats of urbanisation on farmlands.

In summary, interventions need to be designed according to the unique needs of each locality, rather than having standardised products for clients regardless of their community dynamics. The following section also attempts to assess the implications of household characteristics and poverty.

6.1.2 Household characteristics and poverty reduction

The needs of households vary depending on several factors, including, but not limited to, the household size, occupation and other socioeconomic dynamics. As previously discussed, the significance of designing interventions for localities on a case-by-case basis, the same applies to the characteristics of households of clients. The following discussions delve into the poverty reduction implications of clients' occupation, gender, marital status and household size. As Kilara and Rhyne (2014) posit, the financial needs differ in various customer segments, for example, by the age of clients or their gender, and it is compelling for financial service providers to comprehend the specific needs of clients' segments.

It is essential to highlight how SAT, CCU and SRB respond to the different segments of clients' needs. Indeed, young clients may perhaps strive for educational outcomes and some household assets, matured families for livelihood investment and probably, older clients would prefer safe and regular income and payment for health care services. Even at the household level, men and women may well have different gendered needs depending on the role each plays in the family.

6.1.2.1 The role gender in the product design processes and the implications for clients' poverty

Women are disadvantaged or systemically marginalised in their quest to access financial services due to sociocultural obstacles (Brana 2013). It is believed that even when such obstacles are removed, some MFIs sometimes fail to design products and services consistent with the needs of their clients, particularly in the case of women.

Most microfinance products are designed without recourse to the differences in gender roles in the various households and communities (Murray et al. 2002). In the context of this study[93], we observed that both women and men faced a variety of different sociocultural and economic obstacles that influence their ability to reduce their household poverty.

This thesis postulates that suitable financial products and services for poverty reduction should recognise the differences in gender roles and livelihood activities of both men and women. In this way, financial tools can better address the needs of clients and eventually contribute to reducing poverty. The analysis in table 6.4 below shows the MPI[94] (deprived or not deprived) of clients to ascertain how both male and female service users' households are faring in relation to avoiding deprivations in the three dimensions of the MPI (education, health and standard of living).

[93] It is essential to be consciously aware that gender impact assessment of interventions must start from recognising that a project will always affect men and women differently.
[94] This use of the MPI as a measure of service users' household poverty does not suggest a causal relationship resulting from being a member of an MFI. However, we believe that the nature of products designed by MFIs can have some implications for poverty, especially when interventions are designed along the needs of clients that are consistent with the three dimensions of the MPI.

Table 6.4 Clients' gender by MPI status by MFI

MFI			MPI of Clients' HH: Not Deprived	Deprived	Total
SAT	Gender	Male	9(32.1)	5(17.9)	14(50)
		Female	3(10.7)	11(39.3)	14(50)
	Total		**12(42.8)**	**16(57.2)**	**28(100)**
CCU	Gender	Male	10(23.8)	10(23.8)	20(47.6)
		Female	19(45.2)	3(7.1)	22(52.4)
	Total		**29(69)**	**13(30.9)**	**42(100)**
SRB	Gender	Male	14(28)	10(20)	24(48)
		Female	10(20)	16(32)	26(52)
	Total		**27(54)**	**23(46)**	**50(100)**
Total	Gender	Male	29(24.2)	29(24.2)	58(48.3)
		Female	38(31.7)	24(20)	62(51.7)
	Total		**67(55.8)**	**53(44.2)**	**120(100)**

Source: Fieldwork Data (2017) The relationship is statistically significant in CCU ($x^2 = 6.482, p < 0.05$) *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

Table 6.4 shows that a majority of female-headed households who are clients of SAT and SRB face deprivation in the MPI as compared to male-headed households. With the exception of CCU, where about 45.2% (female-headed households) were found to be 'not deprived' as compared to only 23.8% of their male counterparts in the same MPI category.

However, SAT and SRB recorded the majority of their female-headed households as MPI-deprived, relative to male-headed households. In the case of SAT, about 39.3% of female-headed households were MPI-deprived compared to only 17.9% of the households headed by males. Similar results were established for SRB, where about 32% of the female-headed households were found to be deprived, compared to 20% of their male-headed households.

In the case of CCU, further analysis also revealed strong ($x^2 = 6.482, p < 0.05$) evidence of a relationship between the gender and clients' MPI deprivation category. Several factors could be responsible for the gender disparities in the MPI that may include sociocultural obstacles that militate against women, especially those who are household heads. Gornick and Boeri (2016) argue that poverty reduction strategies, unfortunately, are usually inadequately responsive to the gendered aspects of poverty vulnerabilities. Sociocultural barriers that characterise unequal division of resources (access to land) and labour, including the non-recognition of the 'home care economy' continue to undermine the economic opportunities available to women (Gornick and Boeri 2016).

The level of gender participation in the design of microfinance interventions has implications for the observed disparities in the MPI between males and females. As discussed in the previous chapter[95], SAT and SRB recorded a relatively lower number of female clients with high participation in the design of products and services. It is essential to design products that reflect the livelihoods of both genders and particularly provide solutions based on a deep understanding of the challenges faced by women. As Kilara and Rhyne (2014) observed, sufficiently tailored financial services can support clients to meet their daily livelihood needs and make improvements in their household outcomes.

6.1.2.2 Occupation of clients and implications on poverty

The occupation of clients can have implications on their poverty, especially when interventions are designed to reflect their occupational needs. Financial needs differ in various aspects and segments of the users of financial services. Such needs may vary according to age, gender and the occupation of clients. The study analysed MPI (a proxy for poverty) of clients considering the occupation of the household head. This aspect of the analysis sought to assess the poverty reduction implications of these designed products on their clients according to their respective occupational[96] category. Table 6.5 below presents an analysis of clients' MPI (poverty) according to their household occupational category.

[95] See chapter five, section 5.3: clients' participation in product design. See table 3 in the appendix for further analysis.

[96] The various occupational activities have been grouped into two broad categories: farming and non-farming. This was done to assess the effects of microfinance interventions on each category. Subsequent analysis in the chapter attempts to give a breakdown on the effects of microfinance interventions on different occupational types.

Table 6.5 MPI of clients by main occupational group of the household head

Name of MFI			Occupational Group of Household: Farming	Non-Farming	Total
SAT	MPI	Not Deprived	5(17.9)	6(21.4)	11(39.3)
		Deprived	10(35.7)	7(28)	17(60.7)
	Total		**15(53.6)**	**13(49.4)**	**28(100)**
CCU	MPI	Not Deprived	17(40.5)	12(28.6)	29(69)
		Deprived	7(16.7)	6(14.3)	13(31)
	Total		**24(57.1)**	**18(42.9)**	**42(100)**
SRB	MPI	Not Deprived	12(24)	15(30)	27(54)
		Deprived	13(26)	10(20)	23(46)
	Total		**25(50)**	**25(50)**	**50(100)**

Source: Fieldwork Data (2017) Note: Figures in brackets represent the corresponding percentage scores for each frequency.

The above findings indicate that the majority of clients in SAT and SRB are deprived in the farming category relative to non-farming. In the case of SAT, about 17.9% and 21.4% of their clients in the farming and non-farming occupational groups respectively were found to be non-deprived in the MPI. On the other hand, about 35.7% and 28% of clients in the farming and non-farming household categories were deprived in the MPI, respectively.

Regarding CCU's clients, the majority of respondents in farming (40.5%) were found to be non-deprived as compared to 28.6% of clients in the non-farming occupation. On the contrary, the findings also established that 16.7% of CCU's clients in the farming occupation were 'deprived', which was slightly higher than the 14.3% of clients who were 'deprived' in the non-farming category.

The findings for SRB were quite similar to those of the SAT to some extent. Most of the 'deprived' clients were clustered in the farming category, representing 26% of clients as compared to 20% in the non-farming group. Similarly, 30% and 24% of clients in the non-farming and farming occupations were established to be non-deprived in the MPI. The implications of these findings raise concerns about the nature of microfinance product designs and the ability to respond to the needs of clients engaged in farming as an occupation.

How microfinance products are designed can have ramifications on their efficacy. As evident in previous discussions in chapter five[97], a majority of SAT and SRB clients expressed their dissatisfaction on the design of microfinance products for farming-related activities. Further analysis, evident in table 3 in the appendix, also revealed that a majority of clients in the farming category of SAT and SRB indicated that microfinance products failed to meet their occupational needs[98]. The findings on SAT and SRB are quite instructive and reveal knowledge of how the characteristics embedded in product designs affect clients' poverty.

As previously established, agriculture (particularly crop farming) is the main occupation of the majority of households in the study area. However, it does appear from the analysis that its effect on clients' poverty is limited, given a plethora of factors including inappropriate microfinance product designs. The study also conducted an OLS regression to examine the relationship between clients' business outcomes[99] and household characteristics. The analysis in this regard showed no evidence of a significant relationship[100] between clients' business outcomes and household farming activities.

6.1.2.3 Clients' household size and poverty

The size of the clients' households can have implications for poverty and how to reduce it. From a product design perspective, the size of the clients' households can inform the calibre of which microfinance service to provide. Undeniably, the context of clients' households does matter. The effects of clients' household size on poverty cannot be overemphasised. Large households[101] tend to have an adverse knock-on effect on the households' chances of getting out of poverty. From the analysis the effect of household size on business outcomes of microfinance clients was quite significant. The OLS regressions output

[97] In chapter five, during FGDs, some clients of SAT and SRB complained about unsatisfactory characteristics of products for farmers; especially in relation to unmatched credit terms with the cycle of agricultural activities.
[98] See detailed analysis in table 3 in the appendix.
[99] Business outcomes is the dependant variable. The PCA (dimension reduction) was used to compute the values for this variable. Details of how the PCA was done are provided in detail in the methodology chapter.
[100] See table 6 in the appendix for output of the OLS regression on the effects of clients' household characteristics on business outcomes.
[101] According to the 2010 population and housing census, the average household size in Ghana is 4.5 people.

indicated that the log of household size had an adverse impact[102] on clients' business outcomes ($B = -1.423,\ p < 0.05$)[103]. Table 6.6 below[104] also shows further analysis of the relationship between household size and the MPI of the household.

Table 6.6 Clients' household size by their MPI

MFI			MPI of Clients		Total
			Not Deprived	Deprived	
SAT	Household size	Small HH	5(17.9)	1(3.6)	6(21.4)
		Average HH	3(10.7)	4(14.3)	7(25)
		Large HH	3(10.7)	12(42.9)	15(53.6)
	Total		**11(39.3)**	**17(60.7)**	**28(100)**
CCU	Household size	Small HH	12(28.6)	2(4.8)	14(33.3)
		Average HH	9(21.4)	3(7.1)	12(24.6)
		Large HH	8(19)	8(19)	16(38.1)
	Total		**29(69)**	**13(31)**	**42(100)**
SRB	Household size	Small HH	14(28)	1(2)	15(30)
		Average HH	7(14)	6(12)	13(26)
		Large HH	6(12)	16(32)	21(21)
	Total		**27(54)**	**23(46)**	**50(100)**

Source: Fieldwork Data (2017) Relationships are statistically significant in SAT, CCU and SRB with $\boldsymbol{x}^2 = 7.257\ p < 0.05$; $\boldsymbol{x}^2 = 4.735\ p < 0.10$; and $\boldsymbol{x}^2 = 10.437\ p < 0.01$, respectively. *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

In support of the earlier findings, chi-square analysis for SAT and SRB, the analysis shows evidence of a relationship[105] between clients' household size and the MPI status. There was also some evidence of a relationship established in the case of CCU but only significant at 10%. From the above analysis, it is evident that SAT and SRB clients with larger household sizes were more deprived as compared to clients of CCUs who had relatively smaller household sizes reported in the analysis.

This analysis supports the existing evidence of an adverse relationship between household size and poverty per person in developing countries (Lanjouw and Ravallion 1995; Okurut et al. 2002). The empirical work of Orbeta Jr (2005) also established a relationship between the size of a household and its vulnerability to poverty.

[102] The relationship between log of household size and clients' household size is negative but significant at 5% (t=-2.431).
[103] See details of the OLS regressions results in table 6 of the appendix.
[104] Cross-tabulation in table 6.4 shows the relationship between household size and clients' MPI.
[105] The relationship is significant at 5% and 1% for SAT and SRB respectively.

MFIs should design products that reflect client household dynamics. Poverty is multi-dimensional and therefore needs a scope of complementary services to help address it. In this regard, microfinance services may not be adequate to fight poverty, if not supported by an effective population management policy and social protection. The study revealed in the previous chapter that a majority of CCU clients indicated their involvement in the product design processes; the reverse is true for clients of SAT and SRB.

As the above discussions have shown, designing products that meet clients' household demographic needs contributes to building their resilience against poverty, as Gash and Gray (2016) have made abundantly clear in their empirical work, dealing with households in Burkina Faso. The next section in this chapter seeks to examine how an understanding of clients' poverty context in microfinance product designs affects poverty.

6.1.3 Clients' poverty analysis and poverty reduction

In this section, we argue that a critical understanding of the causes at both micro and macro levels helps policymakers and institutions design appropriate tools to fight poverty effectively. Similarly, in chapter five, we discovered during FGDs with clients that SAT officials usually do not design their products and services adapted to specific poverty analysis[106] in its operational areas. In the context of the study area, for example, products implemented were designed at the top[107] and passed down to the various institutional branches for implementation.

The work of SIDA (2002) contends that it is vital to map out the specific causes and subtleties of poverty at the various macro, meso and micro levels, and not merely a clear understanding of its symptoms. Such understanding of poverty, based on critical analysis, must prescribe a specific basis for action through the identification of positive and negative processes and procedures that need to be followed to counteract any adverse effects of poverty. The causes of poverty

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[106] Poverty analysis is a crucial starting point in national poverty reduction strategies. Most partner countries need support in their analysis (SIDA, 2002).
[107] Products of SAT are designed at the head office in Kumasi (over 500km away from the study area). These products are usually not customised to the specificities of their clients' locality, household dynamics and poverty context.

may well originate from a macro level, as a result of national policy mismatch between what people need to support their functioning and what is provided by the state (Ellis and Freeman 2004).

The measures and policy actions to address this kind of poverty would depend on the level of policy and institutional alignment of poverty reduction strategies with the needs of beneficiaries. Just as it is exceedingly vital to ensure national policy alignment with the local needs of the poor for effective poverty reduction, it is also crucial to ensure that microfinance products match with clients' needs.

The work of Baulch and Hoddinott (2000) conceptualises the causes of poverty, taking into account assets endowments, coping mechanisms for stochastic shocks[108] that saddle the households' chances to use these assets to support their social mobility. As we argued in chapter five, the lack of appropriate microfinance products to address specific causes of poverty and livelihood shocks raises questions as to whether MFIs are indeed committed to alleviating poverty as they claim. The design of products that are fit-for-purpose remains the central argument for this thesis if MFIs are to meet their social welfare motives of sustainably reducing poverty.

This section of the chapter assesses the relationship between the threats[109] that affect clients' livelihoods and the current microfinance products and interventions aimed at reducing poverty. It is vital to ensure that the right problem is not tackled with the wrong tools, as that has always been the case with poverty reduction interventions. This empirical line of inquiry is thus needful and consistent with Coote et al. (2015: 3) opinion on poverty reduction. Accordingly, they postulate that: "poverty cannot be eliminated without addressing the systems and structures that cause and perpetuate it. A systemic approach means recognising the interdependence of society, environment and economy: how they depend on and influence each other and how they can have mutually beneficial or cumulatively destructive effects" (p. 3).

[108] The challenge of clients using significant portions of their livelihood assets to address shocks that emerge in their daily lives was extensively discussed in chapter five. Indeed, some of the clients indicated their inability to accumulate assets to work themselves out of poverty because they continually dispose of their assets.

[109] Threats refer to the livelihoods challenges, sources of poverty and factors that affects clients' ability to accumulate assets.

The table below analyses the contributions of microfinance towards their clients' household outcomes, considering whether products designed by the institutions reflect clients' poverty context. In the case of SRB, chi-square analysis in table 6.7 below established a significant $(\boldsymbol{x}^2 = 7.654\ p < 0.05)$ evidence of a relationship between microfinance contributions to household outcomes and offered products reflecting the poverty context of their clients. The analysis was based on the understanding that when products are fit-for-purpose, they can adequately reflect the context of poverty in the daily lives of people.

Table 6.7 Microfinance contributions to clients' household outcomes by: Do microfinance products reflect clients' poverty context?

Name of Financial Institution			Do MFI Products Reflect Clients' Poverty Context? No	Yes	Total
SAT	Microfinance Contributions to Clients' Household Outcomes	Very Much	2(7.1)	5(17.9)	7(25)
		Somewhat	6(21.4)	3(10.7)	9(32.1)
		Not at All	10(35.7)	2(7.1)	12(42.9)
	Total		**18(64.3)**	**10(35.7)**	**28(100)**
CCU	Microfinance Contributions to Clients' Household Outcomes	Very Much	4(9.5)	17(40.5)	21(50)
		Somewhat	6(14.3)	5(11.9)	11(26.2)
		Not at All	3(7.1)	7(16.6)	10(23.8)
	Total		**13(31)**	**29(69)**	**42(100)**
SRB	Microfinance Contributions to Clients' Household Outcomes	Very Much	7(14)	10(20)	17(34)
		Somewhat	5(10)	17(34)	22(44)
		Not at All	8(16)	3(6)	11(22)
	Total		**20(40)**	**30(60)**	**50(100)**

Source: Fieldwork Data (2017) ***Relationship is statistically significant only for SRB $(\boldsymbol{x}^2 = 7.654\ p < 0.05)$ *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

However, further analysis revealed that clients who indicated microfinance products reflected their poverty context also realised some level of contributions towards their household outcomes. In the case of SAT, 17.9% of clients who declared that microfinance products support their poverty context also realised 'very much' contribution to their household outcomes. Conversely, about 35.7% of clients who indicated that SAT's products did not reflect their poverty context realised no effects on their household outcomes.

A similar trend in SAT was also observed in the case of CCU's clients, except that fewer respondents (7.1%) stated that they did not affect their household outcomes because they indicated products never reflected their poverty context. In the same vein, about 40.5% of clients said CCU's products matched their poverty context and as a result, contributed ‘very much’ towards their household outcomes.

The analytical finding for SRB’s clients was rather interesting. A fairly significant number of clients (14%) answered that SRB’s products failed to meet their poverty context, yet they realised ‘very much’ contribution to their household outcomes. This finding was contradictory to the arguments advanced in this section. However, some follow-up interviews revealed that some clients used their loans to address household exigencies rather than the purposes for which the credit was approved.

At the same time, about 20% of clients also indicated that SRB’s products suit their poverty context and, as a result, contributed ‘very much’ to their household outcomes. On the flip side, 16% of clients were found not to have realised any contribution to their household outcomes, owing to their position that SRB’s products were not consistent with the poverty context.

However, then again, what could have accounted for some MFIs not to design products consistent with their clients’ poverty context? As mentioned in chapter five, SAT product design processes are centralised at the top (head office) leading to the same products being implemented for all clients irrespective of their contextual issues. However, these findings also lend credence to earlier revelations from interviews and FGDs in chapter five, that show the poverty context of clients of CCU was taken into account during the design of interventions.

Designing products and services that meet the poverty context of clients requires some level of involvement of clients in the processes. However, as shown in subsequent sections in this chapter, the quality of participation of clients also matters, if products are to be designed to be fit-for-purpose. When clients are involved in the product design processes, it allows issues such as the causes of clients’ household and community poverty to be considered in the design of customer-centric interventions.

The analysis in this chapter also sought to look at the causes of poverty and the reasons that make it continually challenging for individuals to work themselves out of traps of rural or urban poverty. The study opines that establishing the cause of an individual's or community's poverty is an essential first step towards addressing both the cause and effects of poverty[110] and not the symptoms. As such, effective policies and products that recognise the origins of peoples' poverty and seek to alleviate it, must be seen not merely as an escape from the poverty trap, but also a practical guard against the risk[111] of people sliding into poverty (SIDA 2002). Table 6.8 below, analyses the various status of clients' households and their associated poverty context.

Table 6.8 Clients' MPI status by household main source or cause of poverty

			HH Main Source or Cause of Poverty				
MFI			Inadequate Finance	Lack of Employment	Poor Soil Fertility	Lack of Market Access	Total
SAT	MPI	Not Deprived	1(3.6)	3(10.7)	3(10.7)	4(14.3)	11(39.3)
		Deprived	8(28.6)	4(14.3)	5(17.9)	0(0)	17(60.7)
	Total		9(32.1)	7(25)	8(28.6)	4(14.3)	28(100)
CCU	MPI	Not Deprived	5(11.9)	8(19)	7(16.6)	9(21.4)	29(69)
		Deprived	4(9.5)	7(16.6)	1(2.4)	1(2.4)	13(31)
	Total		9(21.4)	15(35.7)	8(19)	10(23.8)	42(100)
SRB	MPI	Not Deprived	9(18)	8(16)	3(6)	7(14)	27(54)
		Deprived	9(18)	7(14)	3(6)	4(8)	23(46)
	Total		18(36)	15(30)	6(12)	11(22)	50(100)

Source: Fieldwork Data (2017) The statistical relationship is only significant for SAT ($\boldsymbol{x^2} = 9.225\ p < 0.05$) *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

The analysis in the above table shows that, in the case of SAT, most of its 'deprived' clients indicated inadequate finance (28.6%) as their leading cause of poverty. At the same time, clients who are 'non-deprived' identified a lack of market access (14.3%) as the profound cause of their poverty. However, in the case of CCU, a majority of the 'deprived' clients mentioned a lack of employment opportunities (16.6%) as the primary source of their poverty.

The 'non-deprived' counterparts, however, cited lack of market access (21.4%), like the opinion expressed by clients of SAT in the same poverty context. Regarding SRB, a majority of their 'deprived' clients' stated inadequate finance (18%) as the leading cause of poverty. This cause of poverty also resonated

[110] Identifying the causes rather than the effects and symptoms of poverty helps in addressing the very reasons responsible for people's poverty.
[111] The risk of people falling into poverty is viewed as transient poverty, which results from shocks and crises developing into chronic poverty.

with a majority (18%) of ‘non-deprived’ clients. Though the analysis reveals different immediate causes of poverty across different poverty situations of clients in all three MFIs, it is vital also to highlight the accompanying effects of other common causes/factors that are at the fore[112]. In designing products for poverty reduction, these different immediate and intermediate causes of poverty must be considered, due to their interconnected nature.

Regarding SAT and SRB, a majority of clients mentioned inadequate finance and the lack of market access as primary causes of poverty. However, other intermediate causes such as poor soil fertility and the lack of employment opportunities contribute to exacerbating the immediate cause. In the opinion of some clients of SAT and SRB who were interviewed, access to agricultural inputs such as improved seeds and fertilisers that recover soil fertility would enable increases in their yields and ultimately increase income levels. There have been significant empirical studies that suggest a relationship between access to agronomic inputs[113] and agricultural productivity – increased crop yields per hectare that ultimately reduce poverty (Sachs 2008; McArthur and McCord 2017).

To address the challenge of inadequate finance with SAT and SRB clients, it would be appropriate to attempt to address issues of soil fertility (by linking farmers to suppliers of fertilisers under a special agriculture credit line), that would lead to the creation of employment opportunities and eventually increased income. It is also vital to mention, however, designing products for poverty reduction is not a linear process; it requires a series of interactions between MFIs and various institutions (governmental and NGOs).

In the above analysis, it is palpable that to clients of CCU, lack of access to markets was an immediate cause of poverty. However, during interviews and FGDs with clients of CCU, some indicated their desire for the central government to build a market square for their respective communities, to support buying and selling. In the case of CCU clients, they indicated that it would inure to their livelihood outcomes if CCU linked farmers/producers to

[112] These causes (both immediate and intermediate) are interconnected.
[113] Fertilisers, water and improved seeds.

prospective buyers (aggregators). Accordingly, they believed that would help reduce post-harvest losses, ensure guaranteed prices and increased revenues.

SAT already had a similar product in place[114], but it benefits large-scale farmers rather than smallholder farmers. Most clients bemoaned the cheating of the nucleus farmers, where aggregators bought their farm products at knockdown prices. In this intervention, farmers were required to farm cash crops that were needed by manufacturing companies (mostly in the breweries sector). This intervention may appear to address issues of post-harvest losses and bridge the lack of market for clients; it also has implications for clients' food security. At the time of this study, farmers bemoaned the low prices aggregators paid for their produce. Some clients also complained that most of their farmlands were used to cultivate cash crops needed by these companies rather than their staple food desired to support household consumption needs.

Following the above analysis, the causes of poverty, as well as strategies to overcome poverty, may vary between clients, communities and gender. MFIs through poverty analysis need to include the perspectives of their clients in their product design and implementation processes. This is because poverty is multi-faceted, with different causes that are both complex and interconnected. There is a need for policies and products aimed at its alleviation to acknowledge the possible macro, meso and micro linkages. Some of these policy actions would require government policy interventions and investment in public goods[115] such as rural feeder roads, providing access to village market squares, health centres and schools.

In conclusion, for SAT, CCU and SRB to combat poverty based on the causes discussed above, the design of interventions should reflect several dimensions that characterise clients' poverty. As we have considered with all three institutions in this study, even if poverty is caused by one component of the

[114] SAT links farmers to large-scale industrial aggregators, who agree to buy the farm produce during harvest. However, farmers are compelled to farm cash crops that their company needs. This arrangement has implications for clients' food security, since most cash crops are not consumable food at the household level.

[115] Clients of all three institutions living in rural areas, particularly in Gbare, Ping, Hain and Chaperu complained about the deplorable nature of the road networks connecting communities to urban centres. The next chapter seven discusses how to make microfinance work for the poor, taking into consideration issues in the core market and supporting function, as well as the rules of the game.

micro, meso and macro levels, it is vital to focus on the strategic linkages of other possible causes. This would enable a much more practical course of action instead of merely addressing the symptoms of the various causes of poverty.

At this point, SIDA (2002) makes it instructive that the dynamics of the social, political and economic structures in each specific context of the poor need to be considered in designing products and policies aimed at poverty reduction. The various micro-macro linkages all need to be adequately teased out. As we discussed in chapter five and revisited in chapter six, at the individual level, poverty is the consequence of the interaction of several factors, not merely one; poverty is socially created, not a natural or 'given' phenomenon. Just as social and economic structures may create poverty, so too can they be the key to positive transformation when adequately fashioned out.

6.2 Clients' livelihood strategies, shocks and poverty reduction

Livelihoods represent a critical component of the daily struggles of many people because they determine how individuals patch their lives together with their limited resources. According to Chambers (1995), a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base. The following section also analyses the various livelihood strategies, shocks and coping mechanisms for these shocks to ascertain their implications for clients' household poverty.

6.2.1 Clients' household livelihood strategies

It is believed that non-farming income sources have witnessed some vital growth over the years, representing almost 35% of the incomes of SSA rural clients and about 50% in the case of Asia and Latin America (Haggblade et al. 2010). Livelihood diversification at the household level is viewed as an avenue to mitigate losses and ensure dynamic livelihood adaptation to the various shocks and opportunities that smallholders confront (Ellis 2000).

This study argues for MFIs to design products and services that suit the livelihood strategies of clients that would enable households to undertake needful livelihood diversification. For households of clients to diversify their livelihoods to secure improved standards of living, both urban and rural households need to be able to make revenues, accumulate assets and further diversify across the farm and non-farm activities (Ellis and Freeman 2004). Table 6.9 below shows an analysis of the clients' MPI status and their corresponding households' sources of livelihood. We believe that households that receive microfinance products and services that are fit-for-purpose make better improvements to the standard of living and reduce their deprivations.

Table 6.9 Clients' household's MPI status by clients' HH main source of livelihoods

			HH Main Source of Livelihoods/Income					Total
MFI			Growing Crops	Rearing Livestock	Family Remittance	LEAP Support	Retailing	
SAT	MPI	Not Deprived	4(14.3)	3(10.7)	2(7.1)	0(0)	2(7.1)	11(39.3)
		Deprived	8(28.6)	5(17.9)	1(3.6)	1(3.6)	2(7.1)	17(60.7)
	Total		12(42.9)	8(28.6)	3(10.7)	1(3.6)	4(14.3)	28(100)
CCU	MPI	Not Deprived	13(31)	5(11.9)	2(4.8)	2(4.8)	7(16.6)	29(69)
		Deprived	7(16.6)	4(9.5)	0(0)	0(0)	2(4.8)	13(31)
	Total		20(47.6)	9(21.4)	2(4.8)	2(4.8)	9(21.4)	42(100)
SRB	MPI	Not Deprived	9(18)	7(14)	4(8)	2(4)	5(10)	27(54)
		Deprived	8(16)	6(12)	2(4)	3(6)	4(8)	23(46)
	Total		17(34)	13(26)	6(12)	5(10)	9(18)	50(100)

Source: Fieldwork Data (2017)

The above analysis in the table reveals that the majority of 'deprived' clients accounting for 28.6%, 16.6% and 16% for SAT, CCU and SRB respectively, were found to be involved in growing crops for their livelihoods. A significant number of deprived clients, representing 17.9%, 9.5% and 12%, were also involved in rearing livestock for a living.

Regarding 'non-deprived' clients', the study found 10.7% (SAT), 31% (CCU) and 18% (SRB) of respondents indicate crop-farming as their main livelihood activity. Also, some 'non-deprived' scores of clients of SAT (10.7%) and SRB (14%), indicated keeping livestock, while clients of CCU (16.6%) mentioned they were involved in retailing for their livelihood.

The analysis reveals that since most non-deprived clients, in all three interventions, were involved in crop farming for their livelihood, it was also evident that a similar trend was found for clients who were 'deprived'. These revelations suggest that MFIs need to take into account other sources of livelihoods that clients are engaged in to provide them with options of diversifying across livelihoods as a way of mitigating associated risk. As at the time this study was conducted, all three institutions only provided products that supported clients' involved in crop farming, with no support for those involved in livestock keeping.

Some clients indicated they were unable to expand or delve into other livelihood activities such as animal rearing due to the apparent lack of support for such enterprises. They added that reducing rainfall[116] patterns over the years, coupled with depleting soil fertility, rendered crop farming unpredictable and less rewarding to both rural and urban dwellers. Thus, to most clients, livestock keeping and increased government support to aged household members through the LEAP programme offers some latitude of respite to clients. Evidence from Yaro (2006); Alobo Loison (2015) postulates that when clients are offered the required product support to diversify their livelihoods, across farm and non-farm activities, it enables clients to guard against livelihood shocks and the vulnerability of perpetually living in poverty or falling back into it.

6.2.2 Livelihood shocks and poverty

In this study, the livelihood shocks and vulnerabilities confronted by rural and urban households appear in multiple forms and present adverse implications for poverty. Shocks such as illness/injury and death of a family member, loss of livestock to diseases or theft, poor crop harvest due to changes in climate conditions and other livelihood shocks (reduction in the livelihood income sources, adverse macroeconomic factors such as inflation) could pose significant constraints to livelihood endeavours.

[116] Concerns over increasing threats of climate change and its associated vulnerabilities called for effective adaptation mechanisms through livelihood diversification, especially for farming communities.

The study concludes that a variety of coping mechanisms are deployed by households to avert, alleviate and cope with the consequences of these shocks. Borner et al. (2012) contend that the limited resource base of poor rural people and their households makes it difficult for them to cope with unfavourable economic conditions. The over-reliance on agricultural activities as a source of livelihood is undermined by the increasing vulnerability of the sector to climate change. In the same vein, Aasoglenang and Bonye (2013) confirm that the adverse implication of the weather in Ghana contributes to worsening the incidence of poverty among poor rural households and thus, they deploy diverse strategies such as mixed cropping and farming, petty trading and sometimes migration for short-term employment in urban areas.

Some coping mechanisms used to mitigate livelihood shocks tend to adversely affect households' resilience to poverty and weaken their ability to accumulate assets in the long term. In the context of this study, we hold that, for MFIs to have long-lasting social welfare impact, they need to design a product that reflects clients' shocks. Gash and Gray (2016) opine that MFIs should design financial products for specific livelihood shocks (not all shocks are considered equal). Specific shocks such as health savings/insurance and credit products could enable poor people to build resilience to shocks and reduce long-term costs associated with using the wrong mitigation approaches. The table below analyses the responses of respondents regarding shocks they experienced in the past 24 months and their MPI status.

Table 6.10 Clients' livelihood shocks experienced in the past 24 months by their corresponding MPI status

			Shocks Experienced in the Past 24 Months					
Name of MFI			**Death in HH**	**Illness/Injury**	**Loss of Livestock**	**Poor Crop Harvest**	**Other Shocks**	**Total**
SAT	MPI	Not Deprived	2(7.1)	1(3.6)	4(14.3)	3(10.7)	1(3.6)	11(39.3)
		Deprived	3(10.7)	1(3.6)	4(14.3)	7(25)	2(7.1)	17(60.7)
	Total		**5(17.9)**	**2(7.1)**	**8(28.6)**	**10(35.7)**	**3(10.7)**	**28(100)**
CCU	MPI	Not Deprived	2(4.8)	10(23.8)	6(14.3)	5(11.9)	4(9.5)	27(64.3)
		Deprived	1(2.4)	4(9.5)	3(7.1)	5(11.9)	2(4.8)	15(35.7)
	Total		**3(7.1)**	**14(33.3)**	**9(21.4)**	**10(23.8)**	**6(14.3)**	**42(100)**
SRB	MPI	Not Deprived	3(6)	2(4)	12(24)	7(8)	3(8)	27(54)
		Deprived	1(2)	9(18)	6(12)	7(14)	0(0)	23(46)
	Total		**4(8)**	**11(22)**	**18(36)**	**14(28)**	**3(6)**	**50(100)**

Source: Fieldwork Data (2017) *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

Table 6.10 above shows that the most common shock experienced by most 'deprived' households of SAT and CCU was 'poor crop harvest', representing 25% and 11.9% respectively, with another 18% of SRB's 'deprived' households indicating 'illness/injury of household member'.

On the other hand, households categorised as 'non-deprived' also indicated they experienced some shocks in the past 24 months. In the case of the SAT, 14.3% of clients reportedly indicated 'loss of livestock' as the most dominant shock. About 23.8% of CCU households' (non-deprived) mentioned 'illness/injury of household member' as the most significant shock they confronted. While 24% of SRB's clients indicated 'loss of livestock'.

The above analysis shows that most deprived households of SAT and CCU were more susceptible to 'poor crop harvest' partly due to their inability to access improved seeds that withstand the harsh climate and fertiliser to increase soil fertility. Interviewees of SAT confirmed that there were no available financial instruments to help clients mitigate the risks associated with reducing crop yields.

Undeniably, the influence of climate change in exacerbating some of these main shocks is apparent and its effects on the rural poor through decreasing agricultural productivity and its associated implications for food prices, particularly during lean seasons. The rural poor spend a substantial amount of their livelihood income on household food consumption. Consequently, an increment in prices as a result of a decrease in agricultural productivity (due to climate vulnerabilities) is more likely to render households food insecure.

Similarly, climate variability also puts a strain on the natural resource supply of pasture available for livestock grazing, and that has implications for household asset accumulation. Most of the shocks that households face have a defining link with climate vulnerability, as that threatens clients' income security and its associated impact on the standard of living. In the context of the design of financial instruments, this study argues that SAT, CCU and SRB need to realign their financial tools to address specific shocks that plague the daily livelihoods of their clients. The work of Yaro (2006) claims that tools designed to support clients to diversify livelihoods consistent with their shocks are aimed at securing better living standards by reducing risk, vulnerability and poverty, increasing livelihood income, while enhancing the security of livelihoods and assets.

Following these evident shocks that clients confronted in their daily livelihood operations, the study sought to understand – from the perspective of clients – whether the products designed by various MFIs supported households to cope with shocks. This aspect of the analysis aimed to ascertain the poverty implications for clients of institutions that had products to address shocks. Table 6.11 below gives statistical information on this aspect.

Table 6.11 Do MFI products support HH to cope with livelihood shocks by clients' MPI status?

			Do MFI Products Support HH to Cope with Livelihood Shocks?		
MFI			**No**	**Yes**	**Total**
SAT	MPI	Not Deprived	7(25)	4(14.3)	11(39.3)
		Deprived	12(42.9)	5(17.9)	17(60.7)
	Total		**19(45.2)**	**9(21.4)**	**28(100)**
CCU	MPI	Not Deprived	6(14.3)	23(54.8)	29(69)
		Deprived	7(16.6)	6(14.3)	13(31)
	Total		**13(31)**	**29(69)**	**42(100)**
SRB	MPI	Not Deprived	14(28)	13(26)	27(54)
		Deprived	15(30)	8(16)	23(46)
		Total	**29(58)**	**21(42)**	**50(100)**

Source: Fieldwork Data (2017) The statistical relationship is only significant for CCU $\boldsymbol{x^2} = 4.617\ p < 0.05$ *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

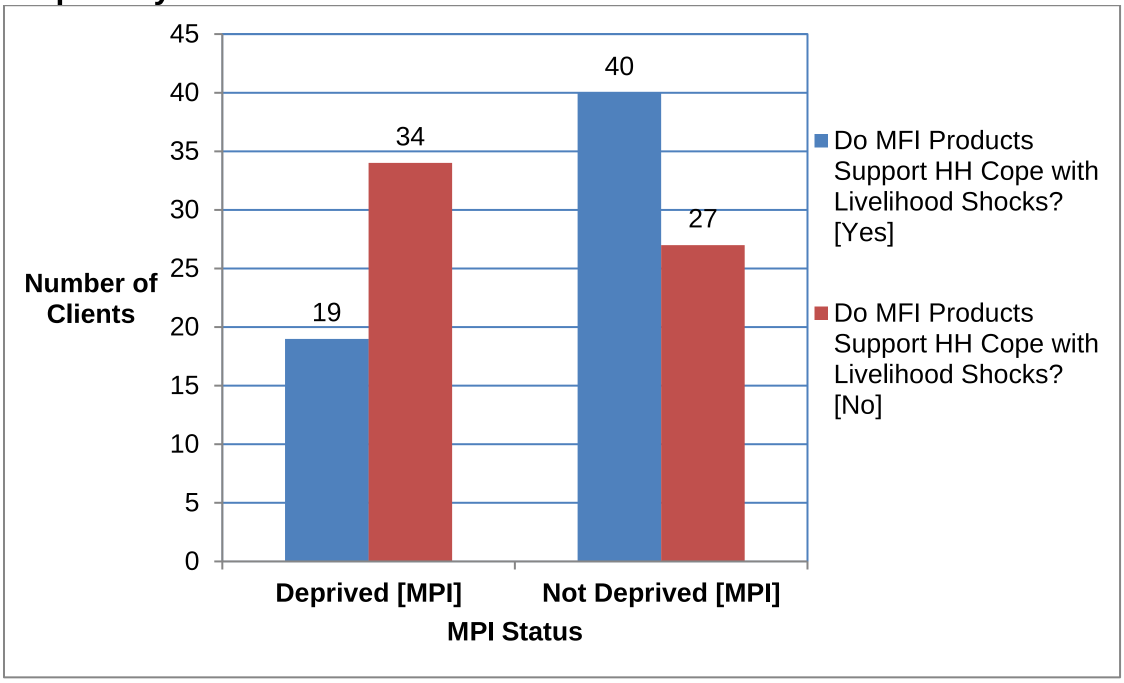
The analysis on the above table suggests a strong relationship $\boldsymbol{x^2} = 4.617\ p < 0.05$[117] between CCU's design of products to support shocks and the MPI status of its clients. It should be noted that a significant amount (54.8%) of clients who affirmed that CCU's products enabled their households to cope with shocks were found to be 'non-deprived'. Similarly, 16.6% of 'deprived' clients indicated that CCU's products do no support their households to cope with shocks.

In the cases of SAT and SRB, 25% and 28% of their 'non-deprived' clients respectively said products from their institutions failed to support them in managing shocks; about 42.9% and 30% representing SAT and SRB 'deprived'

[117] The chi-square relationship is statistically significant at 5%. The relationships in the cases of SAT and SRB were not significant.

clients respectively held a similar opinion. The figure below gives a summary of the above discussion.

Figure 6.1 Designing products to reflect clients' shocks have implications for poverty



Source: Fieldwork Data (2017)

Figure 6.1 suggests that 34 out of 53 deprived clients indicated MFI's products do not support them to manage shocks; however, the reverse was true for non-deprived clients, as 40 out of 67 said microfinance products help mitigate shocks. It is instructive to conclude that deprived clients do not have more access to products that support them to manage shocks as compared to their non-deprived counterparts. In other words, being deprived limits a client's options of accessing microfinance tools to support in mitigating the risk of livelihood shocks. The following section delves into commonly used coping mechanisms for shocks and how that affects poverty.

6.2.2.1 Coping mechanisms for livelihood shocks and poverty

This section of the analysis attempts to understand the strategies used by households to cope with shocks and the poverty implications for clients. The study was particularly interested in the role microfinance can play in ensuring that households have access to positive coping mechanisms for shocks that enable households to build up savings for productive investment purposes. The choice of clients' preferred coping mechanisms came from an initial pilot study in the Upper East Region of Ghana, a region with similar demography to the study area. Clients were asked to mention what they did in addressing livelihood shocks when they do arise.

The strategies clients adopted are indicative of their availability, and the role MFIs play with suitable tools to help clients manage shocks. They covered options such as selling of household assets/livestock (small or large), drawing on personal or household savings, borrowing money from MFIs, restructuring loans (delaying in loan repayments), getting support from self-help groups and reducing food consumption through the sale of household food grains. The pre-test that preceded this study also considered other coping mechanisms, such as: taking children out of school; working extra hard; migrating to urban centres for economic purposes; and doing nothing. However, these additional mechanisms were excluded from the main study.

These options were dropped because they were not widely used in the pilot community. To some respondents, migrating to urban centres for economic purposes was more of a culture than a coping mechanism for shocks. Table 6.12 below, shows an analysis of commonly used coping mechanisms according to clients' poverty levels.

Table 6.12 Mechanisms of managing livelihood shocks by clients' MPI status

			Coping Mechanism for Household Shocks						
Name of MFI			MFI Loan	Use Savings	Sale of Assets/Livestock	Self-Help Group	Sale of Food Grains	Loan Repayment Delay	Total
SAT	MPI	Not Deprived	2(7.1)	3(10.7)	2(7.1)	0(0)	3(10.7)	1(3.6)	11(39.3)
		Deprived	0(0)	3(10.7)	6(21.4)	2(7.1)	5(17.9)	1(3.6)	17(60.7)
	Total		**2(7.1)**	**6(21.4)**	**8(28.6)**	**2(7.1)**	**8(28.6)**	**2(7.2)**	**28(100)**
CCU	MPI	Not Deprived	14(28.6)	7(21.4)	1(2.4)	2(4.8)	2(4.8)	3(7.1)	29(69)
		Deprived	0(0)	3(7.1)	1(2.4)	0(0)	3(7.1)	6(14.3)	13(31)
	Total		**14(33.3)**	**10(20)**	**2(4.8)**	**2(4.8)**	**5(11.9)**	**9(21.4)**	**42**
SRB	MPI	Not Deprived	2(4)	6(12)	3(6)	9(18)	5(10)	2(4)	27(54)
		Deprived	1(2)	2(4)	7(14)	2(4)	8(16)	3(6)	23(46)
	Total		**3(6)**	**8(16)**	**10(20)**	**5(22)**	**13(26)**	**5(10)**	**50(100)**

Source: Fieldwork Data (2017) The statistical relationship is only significant for CCU $\boldsymbol{x^2} = 9.414\ p < 0.10$ *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

The above table 6.12 shows that there were two most dominant coping strategies used by clients of SAT to manage shocks when they do arise, which included the ‘sale of assets/livestock’ (28.6%) and ‘sale of food grains’ (28.6%). The ‘use of savings’ (21.4%) was also somewhat widely used to manage shocks. Regarding the strategies used in the case of CCU, it was apparent that the majority of clients used ‘MFI loans’ (33.3%), ‘loan repayment delay’ (21.4%) and the ‘use of savings’ (20%). For clients of SRB, the most frequently used strategies included ‘sale of food grains’ (26%), ‘self-help groups’ (22%) and also the ‘sale of assets/livestock’ (20%).

The choice of coping mechanisms to deal with shocks also largely depends on the individual household’s poverty context and the availability of options for mitigating, adaptation and coping with shocks. In the case of SAT, the commonly used coping mechanisms by deprived clients included ‘sale of assets/livestock’ (21.4%) and ‘sale of food grains’ (17.9%). On the other hand, their non-deprived counterparts widely ‘used savings’ (10.7%) and ‘sale of food grains’ (10.7%). For CCU clients, most deprived households used ‘loan repayment delay’ (14.3%) and others also ‘sold food grains’ (7.1%) and ‘used savings’ (7.1%) as a coping mechanism for shocks.

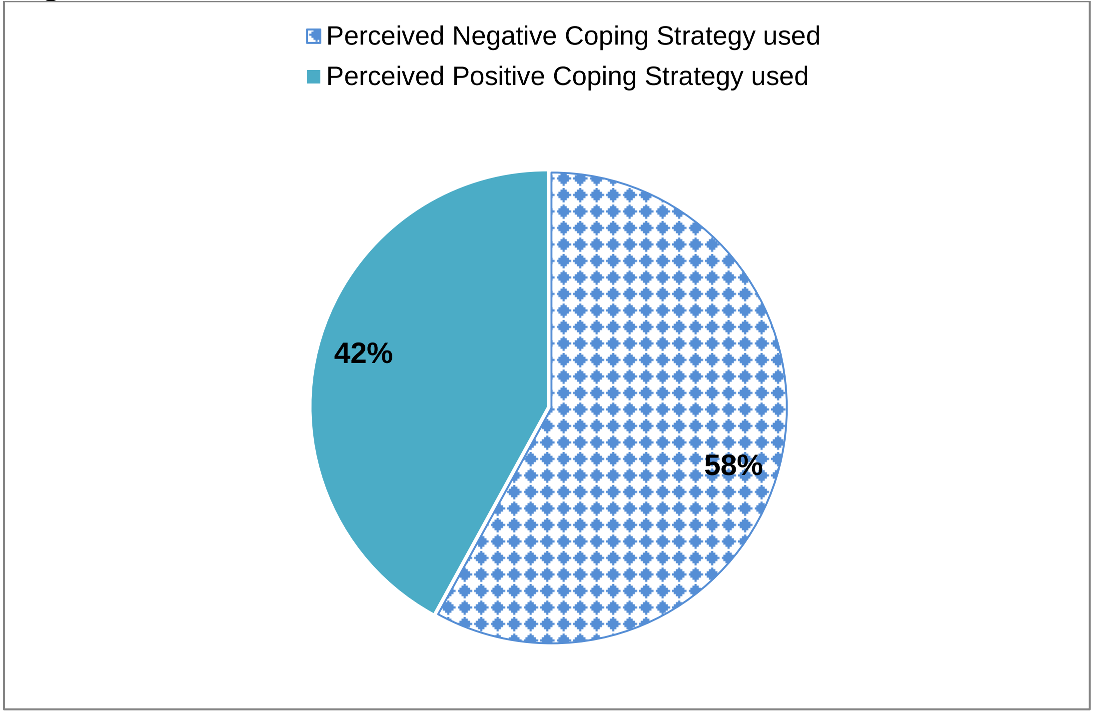
Also, non-deprived clients of CCU were found to be commonly using ‘MFI loans’ (28.6%), while others ‘used savings’ (21.4%) to manage their shocks. In the case of SRB, most of their deprived households indicated they commonly used ‘sale of food grains’ (16%) while others also used ‘sale of assets/livestock’ to manage shocks when they do arise. For non-deprived clients, the regularly used strategies included ‘self-help groups’ (18%) and the ‘use of savings’ (12%), with other households sometimes using the ‘sale of food grains’ (10%).

From the above analysis, the study established a series of trends in the way and manner coping strategies were used among households of SAT, CCU and SRB. The use of strategies such as the sale of household assets/livestock and the sale of food grains was perceived by most households to be a negative coping mechanism due to the long-term adverse effects. These negative coping mechanisms were common with households of clients of SAT and SRB.

These findings lend credence to earlier findings in chapter five and table 6.10 above that established that SAT and SRB do not design products that support their clients to manage shocks. The frequency of use of strategies such as borrowing from MFI and loan repayment restructuring by clients of CCU were viewed mainly as positive coping mechanisms. The availability of such financial tools to manage shocks of CCU's clients is indicative of institutions' deliberate action to put in place emergency credit lines and loan restructuring arrangements to deal with unforeseen events that might occur and affect their clients.

In an interview with some clients, the use of some perceived negative coping[118] mechanisms is primarily due to flexibility and availability as compared to the supposed positive coping strategies that lack both flexibility and availability. Figure 6.2 below summarises clients' coping strategies, perceived as negative or positive that are commonly used by the households.

Figure 6.2 Majority of households perceived their coping strategy as negative



Source: Fieldwork Data (2017)

[118] For the purposes of the study, clients considered sale of household food grains, sale of assets/livestock and the use of savings as negative coping mechanisms, as these strategies affected the household's ability to accumulate savings and assets for productive investments.

From the above figure, it is instructive that clients' households mainly used adverse coping devices more regularly than positive ones. This is a significant issue to consider regarding building MFIs' clients' resiliency, through continuous assets accumulation, since the continuous use of such negative coping strategies will eventually set households back, eroding their ability to get out of poverty (Gash and Gray 2016; Crookston et al. 2018).

In conclusion, the continuous use of the adverse coping mechanisms to manage shocks reinforces the essence for MFIs to situate the design of products and services consistent with the needs that characterise the daily livelihood struggles of clients and their households. Designing products to address specific livelihood shocks and fit-for-purpose products would require the involvement of clients in the various stages and processes. The subsequent section delves into clients' participation in product design processes and the implications for poverty.

6.3 What implications does clients' participation in the design processes of intervention have for poverty reduction?

The development of effective poverty-reduction strategies and interventions requires a good understanding of existing power structures, including gender-based ones, and how these structures can influence set goals. It involves the identification of the primary stakeholders (the poor) and ways to support their empowerment and active participation. Osei-Kufuor and Koomson (2014); Hoe et al. (2017) suggest that participation contributes to poverty reduction. This section of the study sought to analyse clients' level of participation in microfinance product design processes and the implications on their poverty outcomes. Table 6.13 below, shows a chi-square analysis of clients' level of participation and their MPI status.

Table 6.13 Clients' participation in product design processes by MPI status

Name of Financial Institution			MPI of Service User: Not Deprived	Deprived	Total
SAT	Level of Participation	High Participation	2(7.1)	3(10.7)	5(17.9)
		Low Participation	0(0)	4(14.3)	4(14.3)
		No Participation	9(32.1)	10(35.7)	19(67.9)
	Total		**11(39.3)**	**17(60.7)**	**28(100)**
CCU	Level of Participation	High Participation	19(45.2)	11(26.2)	30(71.4)
		Low Participation	5(11.9)	1(2.4)	6(14.3)
		No Participation	5(11.9)	1(2.4)	6(14.3)
	Total		**29(69)**	**13(31)**	**42(100)**
SRB	Level of Participation	High Participation	9(18)	7(14)	16(32)
		Low Participation	2(4)	6(12)	8(16)
		No Participation	16(32)	10(20)	26(52)
	Total		**27(54)**	**23(46)**	**50(100)**

Source: Fieldwork Data (2017) Relationships are statistically significant in SAT and SRB with $\boldsymbol{x^2} = 6.618\ p < 0.05$; $\boldsymbol{x^2} = 9.194\ p < 0.01$, respectively

Note: Figures in brackets represent the corresponding percentage scores for each frequency.

The above analysis in the table reveals that 67.9%, 14.3% and 52% of clients of SAT, CCU and SRB respectively indicated they did not participate in the product design processes of various MFIs. In the analysis in the case of SAT, only 7.1% of 'non-deprived' clients said they had 'high participation' in the product design processes, as compared to 10.7% of deprived clients. At the same time, about 32.1% and 35.7% of 'non-deprived' and 'deprived' clients respectively mentioned they did not participate in the product design processes of SAT.

Regarding CCU, most of their clients (71.4%) indicated they had high participation in the product design processes. However, the high level of participation was found to be skewed towards 'non-deprived' clients. The analysis revealed that about 45.2% of 'non-deprived' clients had high participation in the product design as compared to 26.2% of 'deprived' clients. In the case of SRB, the study established that only 32% of clients said they had high participation in the design processes of products, with more 'non-deprived' clients (18%) being the majority as compared to 14% of 'deprived clients'. On the other hand, about 32% of 'non-deprived' clients said they did not participate in the product design processes, while about 20% of deprived clients reported the same.

The analysis shows a surprising trend regarding the impact of participation on poverty, especially in the case of SAT and SRB. In these two institutions, the result goes against existing orthodoxies (McGee and Norton 2000; Brown 2004; Blackburn et al. 2018) that high participation of people in projects results in positive outcomes. It was observed that the majority of SAT's clients, who said they did not participate, were found to be 'non-deprived' or otherwise better off than their counterparts that said they had a high level of participation.

The same trend was established in the case of SRB. A further statistical analysis conducted using a chi-square test of association revealed the following results[119] – $\boldsymbol{x^2} = 6.618\, p < 0.05$ and $\boldsymbol{x^2} = 9.194\, p < 0.01$ – representing SAT and SRB respectively, indicating strong evidence of a relationship between clients' level of participation and poverty (MPI).

However, this study was of the view that since microfinance could affect clients' lives in different components rather than merely their MPI status, we tested this claim across other poverty outcomes of clients. Thus, using OLS regression, we attempt to analyse the effect of clients' level of participation in the microfinance product design process on their household and business outcomes. The analysis found that, at the household level, there was no relationship between 'high participation', 'no participation' and household outcomes of clients of MFIs. Surprisingly, 'low participation' of clients had a positive $B = 0.364\ (t = 1.849),$ $p < 0.10$ relationship with their household outcomes. Regarding clients' business outcomes, the OLS regression model also predicted a positive relationship[120] between 'low participation' $B = 1.307(t = 2.833),\ p < 0.01,$ 'no participation' ($B = 0.364\ (t = 1.849),\ p < 0.05$ and clients' business outcomes.

The OLS results at both the household and business levels are consistent with the earlier statistical analysis in the above table, where a majority of clients with no participation in product design processes were found to be non-deprived as compared to those that had high participation. However, what could have been the reason for these findings where 'low' and 'no' participation yield better outcomes than a high level of participation? In the previous chapter, clients of SAT and SRB confirmed during interviews and FGDs that most of them were

[119] Chi-square results are significant at 5% and 1% for SAT and SRB respectively. There was no evidence of a relationship for CCU.
[120] Note: 'High participation was found to be insignificant and therefore dropped from the model.

seldom involved actively in all three stages of product inspiration, ideation and implementation.

The findings in this section raise concerns on the quality of clients' participation in all stages of the product design, and the need to address issues of elite capture in the process. In all three institutions, it was observed that most clients were in groups, with the executives of the group being the official mouthpiece in dealing with the MFIs. Such arrangements could be a recipe for elite capture among groups, where the wealthier and educated in the group would place self-interest above the group. Some studies have stressed that the needs of people are socially constructed and their participation can be marred with unintended consequences that are shaped by local collusion of both interested parties and dominant groups (Chambers and Cleaver 1997; Cooke and Kothari 2001; Gaynor 2013).

6.3.1 Women and vulnerable people's participation in product design processes and poverty reduction

More broadly, microfinance is perceived to be banking for women and the marginalised in society, who do not meet the requirements of transacting with the mainstream banking system (Hulme and Mosley 1996b); (Armendáriz and Morduch 2010).

There is a high level of informality in the study area (Jirapa), especially for women and other vulnerable groups. With most women involved in petty trading, dressmaking and local alcohol brewing in the non-farming sector, the nature of their livelihood activities means that microfinance can play a useful role in improving their household and business outcome. Participation of women and other vulnerable persons is, therefore, necessary to ensure that their needs are included in the product and implementation processes.

In the case of SAT and SRB, women and other vulnerable groups were less involved in the product design processes as we observed in chapter five. The claim by the staff that women were being empowered was incongruent with the apparent lack of female participation in the design of products and services.

During FGDs with various female groups, those who belonged to SAT and SRB complained about their inability to access credit due to strict group requirements imposed on them by the institutions. Albeit, they preferred some of the products such as the savings and sometimes financial literacy training, clients of SAT and SRB insistently indicated the impact of microfinance on their business and household outcomes would have been much more profound if they were actively involved in the design processes.

Regarding the involvement of women in CCU's processes, interviews with female groups did confirm their active participation in the design and providing feedback to staff. The majority of the women interviewed confirmed the contributions of CCU to helping them cater to their households and business needs.

The testimonies of two women, who have been clients of CCU for a long time, had the following to say:

> When I joined CCU some 21 years ago, I only used to make daily/weekly savings of sales of shea butter, with the mobile bankers who visited our community. However, because of the gradual extinction of the shea tree and its adverse effects on my business, I decided to start a 'chop-bar'[121] business in the village market square. For five years, I operated the restaurant in the open space; this has health implications for the customers and me. CCU helped me build my current restaurant, and also helped to connect to the national electricity grid. My daily sales have increased because; the chop-bar appears very appealing to the rich as well (Ayishetu, CCU, Hain).

The second interviewee, a fashion designer at the municipal capital (Jirapa central) had the following to say about her experience with CCU:

> As for me, I make dresses for a living, which is what I have done in all my adult life. I used to have a challenge with meeting my production targets, especially during the festive periods, because of the old sewing machines I used. I approached CCU; they supported me to acquire an electric sewing machine. My revenues have since increased, and I have been able to employ a few people and some apprentices in business. Most importantly, I can meet the consumption needs of my household as a widow (Gladys, CCU, Jirapa central).

These revelations are not uncommon in the literature of microfinance, especially when products and services are developed to meet the needs of women. The work of Pitt et al. (2003) in Bangladesh, postulates that activities of MFIs

[121] This is the term for a restaurant in the rural parlance.

contribute to an increased level of consumption at the household level at a rate of 18% when lending to women, and 11% to the household when credit is given to males. Nosheen and Chaudhry (2018) also found an increment in the empowerment index for women who participate in microfinance programmes in the Punjab region of Pakistan. In all these, it was evident that CCU was found to be more participatory with women than SAT and SRB.

Admittedly, none of the three institutions had mechanisms in place to support people with disabilities, youth and people living with HIV/AIDS. This finding was confirmed when the staff of SAT, CCU and SRB were quizzed regarding the lack of specialised products for these categories of people. The staff indicated that they do not discriminate on the provisions of their services provided individuals or groups meet the criteria of MFIs. This response from the staff appears presumptuous in the fact that they seem to be offering the same products and services to all and sundry without recourse to their unique needs that define their vulnerabilities in society.

Table 6.14 below reveals some statistical findings regarding clients' participation in the design of products across gender and the implications for poverty.

Table 6.14 Clients' MPI status by: Did client participate in product design process? (By gender)

Name of Financial Institution				Did Client Participate in Product Design Process? No	Yes	Total
SAT	Female	MPI	Not Deprived	3(10.7)	3(10.7)	6(21.4)
			Deprived	7(25)	1(3.6)	8(28.6)
		Total		**10(34.7)**	**4(14.3)**	**14(50)**
	Male	MPI	Not Deprived	0(0)	5(17.9)	5(17.9)
			Deprived	5(17.9)	4(14.3)	9(32.1)
		Total		**5(17.9)**	**9(32.1)**	**14(50)**
	Total	MPI	Not Deprived	3(10.7)	8(28.6)	11(39.3)
			Deprived	12(42.9)	5(17.9)	17(60.7)
		Total		**14(50)**	**14(50)**	**28(100)**
CCU	Female	MPI	Not Deprived	2(4.8)	10(23.8)	12(28.6)
			Deprived	1(2.4)	1(2.4)	2(4.8)
		Total		**3(7.1)**	**11(26.2)**	**14(33.3)**
	Male	MPI	Not Deprived	3(7.1)	14(33.3)	17(40.47)
			Deprived	1(2.4)	10(23.8)	11(26.2)
		Total		**4(14.3)**	**24(85.7)**	**28(100)**
	Total	MPI	Not Deprived	5(11.9)	24(57.1)	29(69)
			Deprived	2(4.8)	11(26.2)	13(31)
		Total		**7(16.6)**	**35(83.3)**	**42(100)**
SRB	Female	MPI	Not Deprived	5(10)	7(14)	12(24)
			Deprived	7(14)	7(14)	14(28)
		Total		**12(24)**	**14(28)**	**26(52)**
	Male	MPI	Not Deprived	5(10)	9(18)	14(28)
			Deprived	3(6)	7(14)	10(20)
		Total		**8(16)**	**16(32)**	**24(48)**
	Total	MPI	Not Deprived	10(20)	16(32)	26(52)
			Deprived	10(20)	14(28)	24(48)
		Total		**20(40)**	**30(60)**	**50(100)**

Source: Fieldwork Data (2017) *Note:* Figures in brackets represent the corresponding percentage scores for each frequency.

The findings in the above table confirm the previous discussion that CCU involved women in the design of products and services more than SAT and SRB. Accordingly, a majority of CCU women who participated in the product design process were found to be 'non-deprived', as compared to that of SAT and SRB reflecting 10.7% and 14% respectively. Women's participation does matter for their poverty level and economic empowerment. The findings in the above table further confirm this notion, that a majority of women with SAT and SRB representing 25% and 14% respectively that did not participate in the product design process were found to be 'deprived'.

In conclusion, designing customer-centric products requires close involvement of both existing and prospective clients, with a critical focus on women and other vulnerable groups. Frankiewicz and Churchill (2011); Mishra and Bisht (2013); Kotler et al. (2019) opine that many good ideas for potential successful products and services originate from customers, hence, there is a need for MFIs to design tools to capture the inputs of customers in the product design processes.

6.4 How does the design of microfinance interventions influence clients' household and business outcomes?

The previous discussion in this chapter critically viewed some critical individual components of clients and examined how they are separately featured in the product designs of MFIs and their implications for poverty. In this section[122], we attempt to examine the impact of the MFIs on the various components of clients' household and business outcomes. This aims to establish whether the various discussions on contextual, poverty analysis, livelihood analysis and participation of clients do have an overall implication for poverty.

6.4.1 Contributions of microfinance towards household outcomes

The variables that represent clients' household outcomes were selected based on existing microfinance impact studies. The pilot study leading to this research helped identify and filter various outcome variables that were suitable and reflective of the study area household dynamics. Essentially, the agreed variables principally help to measure variations in clients' household consumption level and asset accumulation.

The logic behind this analytical technique was to establish how the products and services of SAT, CCU and SRB had contributed to improvements or otherwise particularly in household consumption and asset accumulation. The effect of each variable was categorised into a three-ordinal response from clients. Table 6.15 below shows clients' assessments of the effect of microfinance on their household outcomes across seven variables.

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[122] This section is twofold: contributions of microfinance towards household outcomes, and the other views the consequences from the perspective of business outcomes.

Table 6.15 Microfinance contributions towards household outcomes

Variables	Very Much (%)	Somewhat (%)	Not at all (%)
Supported the HH to cope during emergencies	14.3(78.6) (30)*	35.7 (11.9) (14)*	50 (9.5) (56)*
Contributed to increased HH income	28.6 (40.5) (36)*	28.6 (35.7) (12)*	42.9 (23.8) (52)*
Supported in children's education	14.3 (57.1) (42)*	25(28.6) (8)*	60.7 (14.3) (50)*
Contributed to acquiring long-term HH assets	17.9 (57.1) (18)*	39.3 (31) (22)*	42.9 (11.9) (60)*
Improved HH ability to service debts	28.6 (47.6) (16)*	28.6 (40.5) (24)*	42.9 (11.9) (60)*
Increased HH savings	50.1 (69) (58)*	39.1(21) (24)*	10.7 (10) (18)*
Ability to participate in HH and community decision-making	53.6 (80.8) (74)*	26.4 (10.8) (14)*	20 (8.4) (12)*

Source: Fieldwork Data (2017) *Note:* SAT figures without brackets; CCU figures in brackets and SRB figures with [*****]

6.4.1.1 Microfinance and coping with household emergencies[123]

Microfinance has been documented as a useful tool to contribute to a variety of their clients' household outcomes. Regarding MFIs' support to clients' households to cope with emergencies, the study established that about 14.3%, 78.6% and 30% of respondents representing SAT, CCU and SRB respectively indicated their respective institutions contributed 'very much' towards this enterprise. Conversely, about 50%, 9.5% and 56% of clients representing SAT, CCU and SRB respectively bemoaned the lack of support to their households in coping with emergencies.

A household's ability to cope with unforeseen contingencies is viewed as an indicator of reduction in poverty levels and resilience to shocks. As such, any form of support from an MFI towards reducing household exposure to emergencies would be an effective way of addressing poverty. The significant number of respondents of SAT and SRB (50% and 56% respectively) is indicative of the inadequacy of products and services to address clients' needs of this nature.

[123] A household emergency in the context of this study refers to unforeseen occurrences that are either positive or negative and requires the commitment of household resources to address.

6.4.1.2 Microfinance and household income level

The study also sought to measure the contribution of microfinance towards increasing households' income levels. The use of monetary indicators to measure the impact of microfinance services has gained prominence in the literature. Elhadidi (2018) found that, in Egypt, microfinance has had a positive impact on the household level of income. Accordingly, about 28.6%, 40.5% and 36% representing SAT, CCU, and SRB respondents respectively indicated that their respective institutions contributed 'very much' to increase their household income. In the context of Jirapa municipality, household income primarily comes from the daily livelihood activities such as farming and petty trading – the main drivers of the local economies.

On the contrary, about 42.9%, 23.8% and 52% representing SAT, CCU and SRB respectively indicated that their respective institutions had not contributed to increasing their household income. As such, it can be inferred that SAT and SRB were not doing much regarding providing the necessary products and services to enable their clients to increase their livelihood income. As previously discussed, in a quest to have an enormous welfare effect on clients and their households, MFIs should design products and services that seek to address the on-the-ground constraints that paralyse income-generating enterprises of clients.

6.4.1.3 Microfinance and support for households' children's education

Regarding microfinance support for clients' children's education, 14.3%, 57.1% and 42% representing SAT, CCU and SRB respectively affirmed that their respective institutions contributed 'very much' to this enterprise. The impact of CCU on their clients' children's education reemphasises the importance of microfinance, especially when products are fit for purpose. As previously known, there is new evidence that confirms that access to microfinance has a mediating effect on the educational outcomes of clients' children (Peprah 2018; Viswanath 2018).

Conversely, 60.7%, 14.3% and 50% of SAT, CCU and SRB respondents respectively said their institutions did not contribute in any way to their children's education. It was palpable that the lack of support for clients' children's education was more profound with SAT and SRB. The inability to adequately provide support may be a result of a lack of critical household poverty analysis by SAT and SRB, as reported in chapter five (see table 5.2).

6.4.1.4 Microfinance and the acquisition of long-term household assets

Concerning clients' ability to acquire long-term household assets, just a few – 17.9% and 18% respectively – clients of SAT and SRB indicated that their institutions enabled them to acquire long-term household assets. It was apparent that CCU offered support to a majority (57.1%) of its clients to enable them to acquire long-term household assets. On the contrary, a majority of SAT (42.9%) and SRB (60%) respondents, intimated that their institutions did not contribute to their ability to acquire long-term household assets. Long-term assets represent the foundation towards which the households' wealth accumulation strives. The principal long-term assets that were mostly used as an indicator of wealth or poverty included items such as parcels of farmland, livestock and buildings. Others included electronic appliances such as refrigerators, televisions, radios and mobile phones. An increase in assets in the household is regarded as an essential indicator of the effect of microfinance interventions and indeed a measure of household wealth (Isoto and Kraybill 2018).

6.4.1.5 Microfinance and households' ability to manage debts

Next, we attempt to measure how the various institutions under review have contributed to improving their clients' household ability to service or manage debt. The poor sometimes use debt as a short-term mechanism for addressing livelihood shocks, however, the inability for a household or individual client to avoid unsustainable debt levels could keep them trapped in perpetual indebtedness and potentially reduce any gains towards poverty reduction (Chichaibelu and Waibel 2018).

The study unravelled that about 28.6%, 47.6% and 16% of SAT, CCU and SRB respondents respectively did indicate their respective financial institutions contributed enormously towards their ability to manage household debts. At the same time, a significant percentage (42.9% and 60%) of SAT and SRB respondents respectively complained of the lack of support in managing household debts. From this statistical representation, it is clear that SAT and SRB did not offer products and strategies that helped their clients manage their debts through debt restructuring from a period of crisis to a point in time when the client has regained their financial resilience.

During interviews with some clients of SAT and SRB, they bemoaned that the lack of strategies and products to help in managing their household debts have always compelled them to sell some household food or assets to settle their debts. This practice, according to them, further exposes their households to the risk of food insecurity in the short term and poor capital accumulation in the long run.

6.4.1.6 Microfinance and household savings

Savings is one of the most common tools in the literature on microfinance (Rutherford 1998). Regarding SAT, CCU and SRB enabling clients to commit to savings or increase their household level of savings, a significantly large percentage of clients (SAT: 50.1%, CCU: 69%, SRB: 58%) responded 'very much' as the contributions from their respective institutions. On the other hand, only 10.7% (SAT), 10% (CCU) and 18% (SRB) answered 'not at all'. The findings suggest the resolve by the various institutions to mobilise savings from their clients as a source of operational funds, given the lack of subsidised funds to MFIs from donor agencies.

These findings also lend credence to the previous empirical study by (Banerjee and Duflo 2007; Collins et al. 2010; Prina 2015; Sherraden 2017) that the poor can indeed save and need flexible savings tools that are commensurate with their livelihood activities and structured to their shocks. It was observed that some respondents said they used their savings as a means of addressing shocks. As such, the design of appropriate savings tools for specific purposes would inure them to the benefits of both the institution and clients.

6.4.1.7 Microfinance and participation in household and community decision-making

The last variable that examined the household component of the contributions of microfinance was 'improved clients' ability to participate in household and community decision-making'. This study is underpinned with the understanding of poverty as multi-dimensional; hence, the need to assess other non-monetary aspects of clients' lives. In some jurisdictions, microfinance has been found to empower borrowers, especially women, across a set of household characteristics, including decision-making (Akhter 2018; Al-shami et al. 2018).

This study also found substantial evidence to support the above propositions. It was established that an enormous percentage of clients (SAT: 53.6%, CCU: 82.8%, SRB: 74%) confirmed that being a member of the MFI enhanced their ability to participate in household and community decision-making. This finding was significant among women since they were the least socially and economically empowered in the study area due to a deeply rooted cultural system of patriarchy. The results are suggestive of the fact that access to finance has the potential to cause a positive change in some of the unproductive and male-dominated ethos that remains entrenched in most parts of Northern Ghana.

6.4.2 Contributions of microfinance towards business outcomes

Following the above line of discussion, this section also examines the contribution of microfinance across seven variables, selected based on the existing knowledge of the microfinance effect on clients' businesses.

Preliminary interviews and observation on the specific characteristics of the nature of businesses in the study area also helped in arriving at the variables for business outcomes. Consequently, these selected business-related variables helped to measure the effect of microfinance on various aspects of clients' businesses or sources of livelihood. These variables were then measured on a three-ordered response scale, to reflect the opinions of clients regarding the effect of microfinance on their businesses since joining the MFI.

Table 6.16 Contributions of microfinance towards business/livelihood outcomes

Variables	Very Much (%)	Somewhat (%)	Not at all (%)
Expanded business/farm size	25 (73.8) (68)*	60.7 (21.4) (28)*	14.3 (4.8) (4)*
Introduced new business/planted new crops	10.7 (14.3) (22)*	28.6 (23.8) (32)*	60.7 (61.9) (46)*
Introduced a new technology	10.7 (50) (54)*	28.6 (16.7) (32)*	60.7 (33.3) (14)*
Accessed new markets/employed more employees	42.9 (45.2) (36)*	42.9 (21.4) (44)*	14.3 (33.3) (20)*
Reduced cost of doing business and increased profits	17.9 (54.8) (22)*	39.3 (19) (48)*	42.9 (26.2) (30)*
Increased financial literacy/business management	50 (72.4) (46)*	35.7 (4.8) (44)*	14.3 (22.9) (10)*
Acquired new business assets/bought more livestock	14.3 (69)(28)*	32.1 (9.5) (58)*	53.6 (21.4) (14)*

Source: Fieldwork Data (2017) *Note:* SAT figures without brackets; CCU figures in brackets and SRB figures with [*****]

6.4.2.1 Microfinance and expansion of business/farm size

Regarding the effect of microfinance in helping their clients introduce new business/plant new crops, the study found that 25%, 73.8% and 68% of SAT, CCU and SRB answered 'very much'. It was evident that CCU and SRB did contribute enormously towards their clients' business expansion – mostly in the form of farm size. Nevertheless, the idea of business expansion did not reflect increased profitability/income. Some clients (particularly SAT and SRB) indicated that their businesses did not increase profits. Reportedly, about 42.9%, 26.2% and 30% of SAT, CCU and SRB clients said their MFIs did not contribute to reducing the cost of doing business and increased profitability.

6.4.2.2 Microfinance support in introducing new business/planting new crops

Similarly, only 10.7%, 14.3% and 22% of respondents representing SAT, CCU and SRB indicated that their institutions supported them in introducing a new business/planting new crop. A significant number of clients (SAT: 60.7%, CCU: 61.9%, SRB: 46%) indicated their respective financial institutions failed to support them to introduce new business/plant new crops. According to some clients during an interview, their MFI is unenthusiastic about funding new businesses of their clients, primarily because they do not want to take on the risk associated with new business ideas or ventures. As a result, most clients with somewhat viable business ideas end up abandoning such entrepreneurial plans due to a lack of finance.

6.4.2.3 Microfinance and financial literacy/business management

Furthermore, a majority (SAT: 50%, CCU: 72.4%, SRB: 46%) of the clients surveyed indicated that their institutions contributed tremendously towards their financial literacy and business management. Indeed, clients in all three institutions recalled their experiences regarding training given to them on how to keep records of both their expenses and cash inflows. Accordingly, some clients mentioned that such training has contributed to their daily financial management in both the household and business arenas. Notable in all these was a client, who operates a local convenience shop in Hain, who indicated that the training has helped him appreciate the importance of keeping separate financial records from his personal/household financial transactions.

6.4.2.4 Microfinance and the acquisition of new business assets/livestock

Regarding clients' ability to 'acquired new business assets/bought more livestock', the analysis in the study revealed that about 14.3%, 69% and 28% of clients of SAT, CCU and SRB respectively agreed to have benefited from their MFIs in that enterprise.

It was evident that a majority of clients of CCU confirmed their institution's support of them in acquiring new business assets or livestock for productive business purposes. The empirical of work of MkNelly and Kevane (2002), in Burkina Faso, observed that women were successful in making productive investment commitment (such as: buying larger cooking utensils and acquiring large market stalls, among others) when they joined a microfinance intervention in the initial years.

6.5 How does the group lending method meet the poverty reduction objectives of clients and ensure sustainability for service providers?

Group lending is the foundation of the operations of most MFIs and has been used to provide financial services to several poor clients in dispersed communities (Huppi and Feder 1990; Johnson and Rogaly 1997). The work of Marr (2002) emphasises that the objectives of setting up groups in microfinance are twofold: achieving financial sustainability and social welfare objectives of poverty reduction. Studies have attempted to examine the efficacy of joint liability and in ensuring the sustainability of microfinance operations; that is because serving the poor is believed to have high transactional and associated risk (Sharma and Zeller 1997; Creedy and Hoang 2018). Nonetheless, Marr (2002) posits that the mechanisms that facilitate the formation of groups, including their internal structures on how group activities are managed, do have implications for clients' poverty levels.

6.5.1 Group formation strategies and poverty reduction

This section of the chapter analyses the effect of group formation strategies in the financial lives of clients, mainly in ensuring positive business and household outcomes. The study believes that the details of all these characteristics in the group formation process affect the potential effect of group-lending schemes in microfinance.

How a group is formed, its constituents and how the activities within the group are managed can have implications for poverty reduction among group members. Chi-square analysis in the table (table 23 in the appendix) established evidence of a relationship $(x^2 = 13.262\, p < 0.05)$ between the group formation strategies deployed among clients of SRB and the effect on their business outcomes. The strategies and processes used in the formation of groups have the potential to exacerbate already existing inequalities and power relations. For this study, we identified and analysed three reported group formation strategies, agreed among a majority of clients of SAT, CCU and SRB.

We observe that (SAT) 46.2%, (CCU) 19% and (SRB) 28% of clients indicated 'peer-selection with no training' as the strategy used in forming their groups.

This type of group formation strategy entails the self-selection of prospective members among peers, usually, people within the same occupational grouping. The downside of this strategy is that members had no training in how to manage group dynamics and ensure total participation of all members in the decision-making processes of the group.

Some group members did not know their entitlements and responsibilities of being a member, and therefore their active participation in group activities. Regarding how this group formation strategy affected clients' poverty, it was observed that (SAT) 32.1%, (CCU) 4.8% and (SRB) 22% of clients who indicated 'peer selection with no training' as their group formation strategy were also found to have 'not at all' contribution of microfinance towards their business outcomes. Nevertheless, clients of SAT and SRB were more likely to have not received improvement on the business outcomes relative to CCU clients.

Further analysis using OLS regression predicted a negative relationship between 'peer selection with no training' and clients' business outcomes $(B = -0.112,\ p < 0.01)$[124] and household outcomes $(B = -0.029,\ p < 0.05)$[125]. The results implied that groups that were formed through peer selection of members without any form of training experienced some consequences to the business and household outcomes.

Regarding the strategy of forming groups, it was observed that (SAT) 7.1%, (CCU) 50% and (SRB) 18% said they formed their groups through peer-selection after receiving training from their MFIs. Accordingly, clients of SAT: 0%, CCU: 23.8% and SRB: 12% who used 'training and peer-selection' were also found to have had 'very much' contribution to clients' business outcomes. This strategy of group formation usually comes in the form of MFI staff giving prospective group members some necessary training on how to manage group activities, including financial and conflict management. In this regard, it is evident that clients of CCU were viewed as more likely to have received significant contributions towards their business outcomes compared to SAT and SRB clients.

[124] See table 7 in the appendix for details of regression output.
[125] See table 8 in the appendix for details of regression output.

Also, the study used the OLS regression[126] technique to predict a positive relationship between 'training and peer selection' and clients' business outcomes $(B = 1.251,\ p < 0.05)$[127]. The results implied that groups that were formed by way of first offering training to prospective members before peer selection of members had a positive influence on the business outcomes of clients. This result lends sufficient credence to the need to offer training to clients, especially before forming group-lending schemes (with or without joint liability).

Also, forming group-based lending schemes from already existing groups was not as common compared to the earlier strategies discussed above. It was reported that (SAT) 14.3%, (CCU) 14.3% and (SRB) 14% of clients identified with 'formed from existing group' as the strategy used in forming their various groups. Regarding the implications of this group formation strategy on clients' poverty levels, merely a few of the respondents – SAT: 3.6%, CCU: 4.8% and SRB: 6% – were more likely to experience 'very much' contributions towards clients' business outcomes[128]. This finding sought to suggest that, when groups are formed from existing ones, there is a possibility to reinforce already existing problems of power relations that might exacerbate elite capture among groups by more privileged members.

Nevertheless, it was evident that MFI forming groups was the most dominant group formation strategy reported especially among SAT (32.1%) and SRB (40%) clients; with only 16.6% reported for clients of CCU. Also, clients (SAT: 10.7%; CCU: 11.9% and SRB: 14%) who used this strategy of group formation were viewed to have witnessed 'very much' impact on their business outcomes. However, about 20% of SRB's clients were also found to have experienced 'somewhat' contribution to their business outcomes[129].

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[126] The OLS regression on this group formation strategy was not significant when regressed against household outcomes of clients (the dependent variable).
[127] See table 7 in the appendix for details of regression output.
[128] The OLS regression on this group formation strategy was not significant.
[129] The OLS regression on this group formation strategy was not significant.

6.5.2 Group structure and poverty reduction

The structure of most group-based lending schemes (with or without joint liability) takes into context the defining characteristics that make a group representative regarding gender. For this analysis, we identified and verified three main group structures in the study area that defined the composition in most MFIs. These include female-only group, male-only group and mixed-group.

Accordingly, female-only groups have been the most common form of group-based structures in the literature on group-lending (Antoniello 2015; Murshid 2018). To examine the effect of groups formed by females[130] on their poverty levels, we use OLS regression to predict a positive relationship between groups made up of only women and their business outcomes $(B = 1.095,\ p < 0.05)$[131] and household outcomes $(B = 0.569,\ p < 0.01)$[132].

Regarding group structure characterised by only males, the study also sought to examine the effect on clients' poverty outcomes. Male-only groups in the study area were mostly made up of vegetable farmers, dry-season gardeners and owner-managers of SMEs. We observed from our analysis[133] that there is a negative relationship between 'male-only' groups and clients' household outcomes $(B = -0.579,\ p < 0.01)$[134]. Our results in the study area suggest that groups that were formed by only males had a negative effect on their clients' household outcomes. Although these findings cannot be generalised, they lend credence to existing empirical studies that suggest that women with access to microfinance services, especially credit, help empower them and smoothen household consumption (Pitt et al. 2003; Nosheen and Chaudhry 2018; Sinha et al. 2019).

[130] Female or women-only groups.
[131] See table 7 in the appendix for details of the regression output.
[132] Details of the regression output are shown in table 8 of the appendix.
[133] The OLS regression on the relationship between 'male-only' groups and business outcomes of clients (dependant variable) was not significant.
[134] See table 8 in the appendix for details of the regression output.

6.5.3 Knowledge of how group members use funds and implications for poverty

In this section, we attempted to analyse how group members' knowledge of the use of funds by their peers affects their poverty outcomes. This analysis is hinged on the argument that group-based lending with joint liability can sometimes serve as a disincentive to clients from investing funds in the class of investments (Giné et al. 2010).

Table 23, in the appendix, shows that (SAT) 32.1%, (CCU) 11.9% and (SRB) 18% of clients who indicated they knew about other members' use of funds, were found to have received no contributions from their respective MFIs towards their businesses. From the analysis, it is evident that when clients know how their peers in the group use their loan (funds), it does affect their ability to generate to drive optimum utilisation of credit. Further analysis using OLS regression predicted a negative relationship $(B = -0.691,\ p < 0.05)$[135] between 'clients' knowledge of other members' use of funds' and their business outcomes. This result is consistent with Giné et al. (2010) that when clients get to know how other members of their group use their funds, it does have negative implications on the business outcomes of clients.

6.6 Does the design of individual credit products have any poverty reduction ramifications for clients?

The nature and characteristics of credit offered by MFIs can have implications for poverty reduction. This section analyses the nature of the design (characteristics of microcredit) and the effects it has on clients' business and household outcomes.

6.6.1 Eligibility criteria for individual loans

The issue of access to credit has been discussed extensively in the literature on microfinance and poverty reduction among the poor, particularly those living in rural areas. The challenges of credit access for the poor in rural areas have

[135] See table 7 in the appendix for details of the regression output.

always been likened to the high cost of transactions involved in serving the poor, who are mostly in sparsely populated areas (Shankar 2007).

This aspect of the analysis attempted to assess clients' perceptions of the flexibility in accessing individual loans and how that affected their business outcomes (see table 19 of appendix 6). The analysis revealed that 3.6%, 28.6% and 4% of clients of SAT, CCU and SRB respectively indicated the criteria for accessing credit were flexible and had a substantial effect ('very much') on their business outcomes. In general, however, our analysis shows that 17.9%, 57.1% and 12% representing SAT, CCU and SRB respectively, indicated that the processes involved in accessing individual credit were flexible. At the same time, 28%, 2.4% and 6% representing clients of SAT, CCU and SRB respectively admitted that the criteria for accessing credit were not flexible, further affirming that their institutions did not contribute towards their business outcomes. In total, 50%, 11.9% and 54% of clients of SAT, CCU and SRB respectively mentioned that the criteria for accessing credit were not flexible.

The lack of flexibility in accessing individual loans was palpably profound with SAT and SRB as compared to CCU. The likely explanation for the flexible criteria for accessing personal credits among CCU's clients relative to SAT and SRB could be the ownership structure of the cooperative credit union system. The Cooperative Credit Union Association (CUA), of which CCU is a member, was founded on the hinges of promoting social movements, by encouraging regular savings and provision of small credits to members. Flexibility in the product designs does matter, and it is essential for clients' poverty reduction. Further chi-square analysis revealed that there was evidence of a significant relationship $\boldsymbol{x}^{\mathbf{2}} = 8.106\ p < 0.10$ between the eligibility criteria and the business outcome for clients of CCU[136].

6.6.2 Loan amount and implications for poverty

The amount of loan a borrower can access does have ramifications for their poverty. In this respect, the study also assessed whether there was a relationship between the size of the loan accessible to the client and their household and business outcomes. To determine the effects of loan amounts

[136] The other two institutions were not significant.

on the poverty outcomes of clients, we conducted an ordinal logistic regression. We analysed various loan characteristics (independent variables) against business and household outcomes (dependent variables). In this section, attention is given to the different loan amounts clients can access depending on their capacity[137]. Our regression assesses the relationship between loan amounts[138] accessed by clients in the last 12 months against business outcomes. The analysis revealed a negative relationship[139] $(B = -1.418,\ p < 0.01)$ between loan amounts below GH¢500[140] and the clients' business outcomes. Regarding the relationship between loan amounts and household outcomes, the regression model predicted a significant negative relationship[141] $(B = -1.161,\ p < 0.05)$ between any loan amount below GH¢500 and household outcomes.

6.6.3 Loan disbursement and poverty reduction

This aspect of the analysis assessed the poverty implication of the nature of the design of loan disbursement on clients' business and household outcomes. The analysis in the study revealed that designing loan disbursement schedules consistent with clients' livelihood does affect their poverty outcome to an extent. Table 18, in the appendix, shows that (SAT) 10.7%, (CCU) 11.9% and (SRB) 18% of clients all indicated that the disbursement schedules of loans were not consistent with their livelihood cycle.

However, these clients were reported to have had 'very much' contribution to their business outcomes. On the other hand, a majority of the clients, especially for SAT (21.4%) and SRB (24%) said their MFIs did not make any contributions to their business outcomes. These findings follow the clients' assertions that loan disbursements did not meet the schedules of their livelihood activities.

It was also evident in the analysis that clients of SAT, CCU and SRB were 28.6%, 33.3% and 26% more likely to have 'very much' microfinance impact on

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[137] The capacity to draw on a particular loan amount is a function of the clients' savings and availability of collateral and/or guarantorship.
[138] The various loan amounts applied in the regression analysis with the specific codes include: 0=GH¢500 and below, 2=between GH¢501 to GH¢600, 3=between GH¢601 to GH¢700, and lastly, above GH¢700.
[139] The details of the regression output are shown in table 9 of the appendix.
[140] Besides GH¢500, all the other loan amounts used in the regression analysis were not significant.
[141] The details of the regression output are shown in table 10 of the appendix.

their business outcomes respectively, given the fact that their loan disbursements were consistent with their livelihood schedules. Further analysis using ordinal logistic regression also established a negative relationship between the inappropriate disbursements of loans to clients and their business outcomes $(B = -1.458,\ p < 0.01)$[142] and similarly on their household outcomes$(B = -1.854,\ p < 0.01)$[143].

These findings suggest that clients had to take their loans when indeed they became available from their respective MFIs rather than when they needed them to support them in their livelihood activities. The empirical work of Johnson and Rogaly (1997) lends credence to the above findings as they make an instructive assertion that “in some areas where seasonality is a highly significant factor, cash is virtually unavailable during certain times of the year” (pg. 51). In an interview with some clients, they intimated that during planting season in the agricultural cycle, economic activity is always at its lowest level due to non-availability of farm produce for sale. As such, clients usually require loans around this crucial time to purchase critical agricultural inputs to guarantee good yields.

However, most clients interviewed, particularly with SAT and SRB, indicated loans were not always disbursed in their times of real need. Consequently, most clients have always been compelled to adapt complicated strategies to manage their livelihood activities before they receive loans. Accordingly, these adaptation strategies employed by clients before the disbursements of loans have had negative ramifications on their livelihood assets and further undermine clients’ resilience. Tetteh et al. (2018) suggest that when staff delay in disbursing microfinance loans this can lead to clients using funds for unproductive ventures instead of the purpose for which they were contracted.

6.6.4 Loan repayment structure

The issue of loan repayments also generated much commentary among clients. Most of the interest in this issue resonated with the required amounts and frequency of loan repayments by clients. Consequently, clients bemoaned the

[142] Details of the regression output are shown in table 9 of the appendix.
[143] Details of the regression output are shown in table 10 of the appendix.

rigorous repayment schedule of loans and indicated that it exerts incredible pressure on clients and their households. Some empirical findings from south-east Nigeria suggest that microfinance clients are compelled to work twice as hard to meet their repayment terms (Ukanwa et al. 2018a).

As mentioned in the previous chapter, clients complained that the shorter maturity period is given to them to repay their loans, usually demanding that they start repayments before or during harvest season. As a result, most clients who are farmers said they were compelled to sell their farm produce much earlier than planned at giveaway prices to be able to meet their stringent repayment commitments. It is worth mentioning that a majority of SAT (32.1%) and SRB (26%) clients who stated that the loan repayment schedule did not match their business cycle were found to have experienced any effect from their respective MFIs on the business outcomes.

However, using ordinal logistic regression techniques, the study established some surprising results that suggest a positive relationship between stringent loan repayment schedules and clients' business outcomes $(B = 0.892,\ p < 0.10)$[144] and household outcomes $(B = 1.199,\ p < 0.05)$[145]. These findings are mainly inconsistent with the opinions held by clients that strict repayments of loans affect their livelihoods. The findings reiterate the importance of credit in the economic lives of the poor, notwithstanding the concomitant stringent repayment terms clients are compelled to follow. It is important to emphasise that both shorter and longer repayment terms can present negative ramifications for clients.

The empirical of work of Tetteh et al. (2018), with smallholder farmers in Ghana, postulates that microfinance repayment duration should be adjusted to meet the individual borrower needs instead of offering loans terms based on one-size-fits-all.

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[144] See table 9 in the appendix for details of the regression output.
[145] See table 10 in the appendix for details of the regression output.

6.6.5 Structure of interest rates and poverty

The issue of the cost of borrowing in microfinance has been discussed extensively in the literature (Fernando 2006; Roberts 2013; Serrano-Cinca and Gutiérrez-Nieto 2014; Le Polain et al. 2018). The high cost of borrowing from MFIs has been viewed as the cause of loan defaults, the collapse of SMEs and sometimes deaths of debt-burdened borrowers and negative consequences to both the borrower and lender (De Quidt et al. 2018b; Ferrari et al. 2018).

In the context of this study, most clients, notably among those interviewed of SAT and SRB, indicated that the cost of borrowing was high relative to CCU and other orthodox banks elsewhere in the region. In most of the rural communities surveyed, clients (both literate and illiterate) were well-informed of the cost of borrowing, and could explain the adverse effects that had on their financial lives. Chi-square analysis found some evidence of a relationship ($\boldsymbol{x^2} = 10.181\, p < 0.05$)[146] between interest charged and the contribution of CCU towards its clients' business outcomes.

The assessment of the cost of borrowing from the perspective of clients was based on a three-ordered-scale, as: favourable, moderately favourable and not favourable. This was an analytical strategy, because most of the clients did not know the numeric value (interest rates) of the cost of capital and it was established that clients indicated that interest rates were unfavourable on their loans. Some analysis suggested that clients of SAT (17.9%), CCU (7.1%) and SRB (22%) indicated the cost of borrowing from their MFI was not favourable, and as a result did not support their business outcomes[147].

It is vital for MFIs to strive to charge interest rates that are both sustainable and reflective of the borrowers' conditions, that would ensure a win-win situation that supports the going concerns of MFIs' operations while achieving the poverty reduction objectives of MFIs. This view resonated with a significant number of clients, who posited that they would be willing and able to repay loans without hitches if interest rates were favourable and reflective of their conditions.

[146] See table 17 of the appendix for details on the chi-square output.
[147] See the analysis in table 17 of the appendix.

It is worth emphasising that the determinants of the interest rates structure of most MFIs are hinged on their sources of operational capital (Bruton et al. 2015; Mia and Lee 2017). As such, if MFIs depend on debt capital from other sources to finance their operations that would inevitably reflect in the cost of borrowing to clients. In the study, unlike CCU, which is a member-owned institution, both SAT and SRB depended on other sources (including deposits from the public) to finance their microfinance loans to clients. On this score, there is an exigent need for MFIs with the welfare objective of reducing poverty, to explore innovative and alternative sources of cheaper financing for their operations[148].

6.7 Do savings products designed by MFIs enable clients to reduce poverty and how?

Savings represent an essential aspect of microfinance operations, especially in the current trend of diminishing donor funding to the MFIs. Most MFIs in both rural and urban areas have resorted to savings mobilisation as a strategy to reach out to the poor with loan products. Over the years, contrary to the misconception that the poor cannot save because they lack financial resources, recent evidence suggests otherwise (Rutherford 2001; Laureti 2018). This section of the chapter attempts to analyse the poverty reduction implications of the savings products designed.

6.7.1 Clients' motives for saving and poverty

The predominant motives for saving among clients of SAT, CCU and SRB were to pay back loans (53.6%), business expansion (38.1%) and for household emergencies (42%) respectively[149]. Table 20, in appendix 6, suggests that, in the case of SAT, a majority of clients (25%) who indicated they saved funds to pay back loans also mentioned that their MFI failed to contribute towards their business outcomes. Similarly, the study also found 19% of clients who indicated

[148] The manager of CCU intimated the organisation's continuous resolve to search for cheaper sources of financing their operations besides members' savings. He indicated their recent arrangement with a UK charity to start the Deki loan scheme – powered by crowd funding. Details of this is discussed in the next chapter (seven).

[149] See table 20 for details of the motive for clients' savings.

they saved to expand their businesses also experienced 'somewhat' contributions to clients' business outcomes.

Additionally, a majority of SRB clients who saved for household emergencies also mentioned that the activities of their institution failed to contribute to their business outcomes. From the analysis, it is evident that some motives for savings affect clients' poverty (business outcomes) in various ways (positive or negative). Indeed, clients who saved to manage household emergencies and to pay back loans were more likely to not have any positive effect on their business outcomes (poverty). However, savings for business expansion and purchase of farm inputs, as evident in the cases of CCU and SRB, are more likely to result in positive business outcomes. Regarding clients of CCU, further chi-square analysis also established a strong $(\boldsymbol{x^2} = 19.558\ p < 0.05)$[150] evidence of a relationship between reasons for why clients saved and the contributions to business outcomes (poverty).

Regression analysis revealed that there was evidence of a relationship between clients who said they saved to enable them to pay back loans and their household poverty outcomes $(B = 1.395,\ p < 0.05)$. On the contrary, there was a negative relationship between clients saving to address household emergencies and business outcomes $(B = -1.232,\ p < 0.10)$. At this point it is worth noting that designing different products to help clients address household emergencies is necessary and would allow clients to commit their savings to productive investment purposes.

The study also analysed the effectiveness of microfinance savings products to support capital formation for investment. The analysis in the study revealed a negative relationship between savings products that do not support clients in capital formation and the business $(B = -1.355,\ p < 0.01)$ and household $(B = -1.394,\ p < 0.05)$ outcomes of clients. The analysis shows that the current savings products offered by MFIs have been increasingly used in mitigating livelihood shocks and addressing household emergencies instead of supporting built-up lump sums for productive household or business investments. The motives and how the poor commit to savings depend on their prevailing circumstances and their setting (Collins et al. 2010).

[150] The relationship was only significant for CCU.

In all these, it is imperative for financial institutions to provide financial services that adequately match the needs of clients, and not merely give the same products for different purposes. The way and manner savings have been used in mitigating and adapting shocks call for a rethink of the practicability of designing insurance tools to help poor clients adjust to livelihood shocks.

6.7.2 The flexibility of savings products and poverty

As Collins et al. (2010) observed in ‘Portfolios of the poor’, embracing flexibility in the design of savings products for the poor tends to enable MFIs to serve their clients’ households with better tools[151]. In the study, clients’ understanding of flexibility of savings products was concerned with how consistent they were with the livelihood needs. Clients’ knowledge about the amount of money they had saved differed in the two interventions.

In an interview with some clients of the three MFIs, they agreed that flexible savings should adequately address their transaction, speculative and precautionary motives. However, it was observed that clients increasingly used savings as a risk management strategy, rather than for asset accumulation. The continuous use of savings tools as a means of insurance confirms the seeming lack of flexible tools in microfinance to support clients to mitigate household emergencies.

Table 21, in the appendix, assesses the flexibility of savings products and their poverty reduction implications across the three institutions. For the analysis, respondents were asked to choose from a three-ordered scale of responses (satisfactory, moderately satisfactory, not satisfactory) depicting the opinion of the savings product offered by their MFIs. The analysis in the table revealed that a majority of clients of SAT (46.4%) indicated their assessment of their savings products was not satisfactory. In contrast, a majority of CCU’s clients (42.9%) and SRB’s (50%) reported that the level of flexibility of savings products was satisfactory.

[151] Savings products that enable poor households to manage their finances on a daily basis that allow them to save up for long-term investment purposes.

However, regarding the poverty reduction implication of various levels of flexibility of savings products, it is evident that a majority of SAT's clients who indicated they were moderately satisfied (28.6%) also said their MFIs did not contribute anything towards their business outcomes. In the case of clients of CCU, a majority of satisfied clients indicated that CCU had contributed 'very much' (21.4%) towards their business outcomes. Lastly, a majority of SRB's clients who were found to be satisfied with the level of flexibility of savings products did indicate they received 'somewhat' (26%) contributions towards their business outcomes.

Regarding the flexibility of the savings collection schedules from clients in their various communities, it was evident from the analysis that weekly collection schedules were found to be more effective for clients' poverty outcomes. Regression analysis found that 'weekly' and 'daily' collection of deposits has a positive effect on the business $(B = 1.105,\ p < 0.10)$ and household outcomes of clients $(B = 2.828,\ p < 0.10)$. Most clients expressed their satisfaction with the weekly and daily deposit collection models used by their MFIs, adding that such a model helped their households develop the habit of saving for the future. The work of Collins et al. (2010), 'Portfolios of the poor', makes an accessible claim that the daily and weekly visits by trained deposit collectors and moneylenders in both Africa and India to their clients' homes or workplaces have shown higher level transactions than any other model of deposit collection.

There was also evidence of a relationship between clients' assessment of the satisfactory nature of the savings products offered by their respective institutions and their poverty outcomes. The analysis of clients' assessment revealed that clients who answered that they were satisfied with the design of savings products were likely to have an improvement in the household outcomes. The reverse of this finding was found in the case of clients' assessment of the savings products offered by their MFI and how it influences their business outcomes.

Moreover, our regression analysis found a negative relationship between clients' satisfaction in the savings products and their business outcomes. In an interview, some clients bemoaned the fact that they were unable to save adequately to improve their businesses due to the multiple uses of their savings. Some clients indicated they used parts of their savings to pay back loans and others to address some family emergencies[152]. On this note, it is worth emphasising the need for MFIs to design better and reliable tools that generally support the day-to-day financial management of clients to enable long-term building up of savings for productive investment purposes.

However, because most MFI clients tend to use their deposits to address household emergencies, it would be necessary for specialised products that support the pooling of risk, through insurance, to be designed. According to Collins et al. (2010), the design of 'general-purpose insurance' policies that cover a wide range of livelihood events would incentivise poor households to embrace it, as a substitute to the use of savings as a mitigation strategy.

6.7.3 Interest on clients' savings and the implications for poverty

The issue of interest paid on deposits has been discussed in chapter five, where a majority of clients (SAT: 60.7%, CCU: 71.4% and SRB: 70%)[153] indicated they were not satisfied with the interest paid on their deposit accounts. Interestingly, the issue of interest on clients' deposit accounts generated significant interest among most discussants in FGDs. Most clients expressed their dissatisfaction in what they described as a 'huge' gap between interest charged on their loans and interest they receive on their deposits.

The issue of net interest spread has always been a point of contention in both conventional banking institutions and MFIs. Some clients indicated that they have never received any form of interest payment on their deposits, however, this claim was dismissed by the staff of all three institutions, adding that the interest on savings was a legal requirement that cannot be flouted. It was unanimously agreed among the staff of the three institutions that the amount of interest income from deposits was low, but were quick to add that it was a function of the quantum of clients' savings.

Table 22, in the appendix, sheds light on clients' assessments of the interest paid on their deposits and its associated poverty reduction implications. From

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[152] See tables 11 and 12 for details of the regression output.
[153] See table 5.19: How do you assess the interest payment on your deposit account?

the table, it is evident that a majority of clients (SAT: 28.6%, CCU: 31% and SRB: 40%) who indicated they were not satisfied with the interest paid on their deposits, also said their respective MFIs did not contribute towards their business outcomes. Further to the analysis, the study also established that there is strong evidence $(\boldsymbol{x^2} = 9.767\ p < 0.05)$ of a relationship between SRB clients' assessment of the interest paid on their deposits and the contributions towards their business outcomes. However, further analysis using ordinal logistic techniques found a negative relationship between clients' assessment of the interest paid on their deposits and their business outcomes $(B = -1.182,$ $p < 0.05)$.

Most clients' assessments of the interest paid on their deposits was characterised with dissatisfaction, and hence, demanded more interest payment on their deposits or savings accounts. Some empirical studies confirm that interest rates paid on deposits have historically been far lower than what is charged on loans offered by financial institutions in Ghana (Addai et al. 2016; Musah et al. 2018; Kessey 2019).

To conclude, the discussion on savings has shown that savings are an essential element in the financial lives of the poor, but need to be designed according to the livelihood needs of clients. The analysis also revealed that some motives for savings (such as for household emergencies) could be served or addressed by different tools (such as insurance tools). There is a need for MFIs to give more incentives to encourage savings among the poor; this can be done by reducing the net interest margin, through an increase in interest on deposits.

6.8 Chapter summary

This chapter delved into the poverty reduction implication of microfinance product design and implementation. It discussed the need to take into consideration an analysis of the poverty context of clients in the design of microfinance interventions for poverty reduction. It analysed the effect of clients' involvement in product design and implementation processes and concluded with a surprising finding that low participation of clients had a positive effect on their business and household outcomes. Clients engaged in crop farming were more likely to be MPI-poor compared to clients involved in other livelihood groups.

The analysis revealed that most clients were susceptible to: poor crop harvest, illness/injury and loss of livestock as shocks to their livelihoods. Clients and their households also lacked suitable financial tools to help manage livelihood shocks, resulting in the use of negative coping mechanisms to address shocks. The chapter also assessed the implication of the characteristics embedded in the design of group-lending, individual credit and savings products on clients. Joint-liability groups that received training before their formation and groups formed by women only had positive effects on their members' business outcomes. Ensuring flexibility in the eligibility criteria for individual credits and providing adequate loan amounts that reflect the needs of the clients had a positive effect on clients' business and household outcomes. While the nature and structure of loan disbursement also had implications for clients' poverty, lack of convenience in the disbursement of loans had a negative relationship with both business and household outcomes of clients. The chapter concluded that MFIs need to design flexible savings products that reflect clients' livelihoods needs, with adequate incentives to encourage capital formation through regular and long-term savings among the poor.

CHAPTER 7

MAKING MICROFINANCE WORK FOR THE POOR

7.0 Introduction

This chapter[154] covers two major areas: the core market – representing demand (clients), and supply (MFIs) of microfinance, and rules and supporting functions needed to complement the activities in the microfinance market. The objective of the chapter is to explore how the microfinance ecosystem could be made to work effectively and sustainably for the poor. It delves into the nitty-gritty of the microfinance market system[155], particularly exploring the challenges faced by both clients and MFIs, and the way forward. The supporting functions needed to complement the interactions in the core market are also examined in the context of the study area.

7.1 Core market analysis: ensuring systemic change in the microfinance market

The core function in any market system is to create a convenient space to facilitate the exchange of goods and services between providers (supply) and consumers (demand). Indeed, the nature and efficiency of the core market are fashioned by both formal and informal rules, as well as a myriad of supporting functions. To ensure that financial systems, through their services, work effectively for the poor, obstacles that impede the smooth exchanges between parties should be eliminated (Tschumi and Hagan 2008b). Much of the criticisms of the implementation of microfinance have revolved around the 'symptoms', rather than the 'causes' of its failure to address issues of poverty.

In the context of this study, the core function examines the relationship between clients and MFIs regarding the design and implementation of products and services for poverty reduction. This aspect of the analysis aims to explore the various demand and supply constraints in the microfinance market in the Jirapa

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[154] The current chapter addresses the third objective of this study and consequently draws important lessons from the previous empirical chapters.

[155] The market systems approach is a potent strategy to addressing the challenges that inhibit poor people's access to financial services.

municipality with the view to ensuring a systemic change in the market system and reduce poverty.

7.1.1 Demand-side obstacles and the way forward: perspectives of microfinance clients

Markets can help the poor out of poverty but often do not due to multi-faceted reasons. The role of the M4P framework is to understand[156] this complexity in the market system for the poor (Ferrand et al. 2004; Forum 2009).

Currently, the leading microfinance products in most developing countries remain limited to credit allocation and savings mobilisation. Micro-insurance remains challenging to implement due to issues about the appropriate determination of cost and associated risks. In the study area, credit and savings related products were common among the three MFIs under review. Discussions on the obstacles in the demand side of microfinance are limited to credit and savings. In effect, the following sections delve into the obstacles and solutions in the credit market, from the perspective of clients.

7.1.1.1 Clients' perspectives on the obstacles that cause the ineffectiveness in the microfinance credit market

The challenges that affect the development of microfinance have been well documented, however, the causes of these challenges have not been adequately explored. The M4P approach is based on identifying and pursuing the causes to reveal practical solutions to the obstacles that face development.

The research examined the various causes of the obstacles to access to credit in the microfinance market in the study area. The identified challenges to access to credit from the perspective of clients included: inadequate loan amounts, stringent collateral requirement, strict loan terms[157], hidden charges, poor financial management of clients' businesses, high interest rates, loans

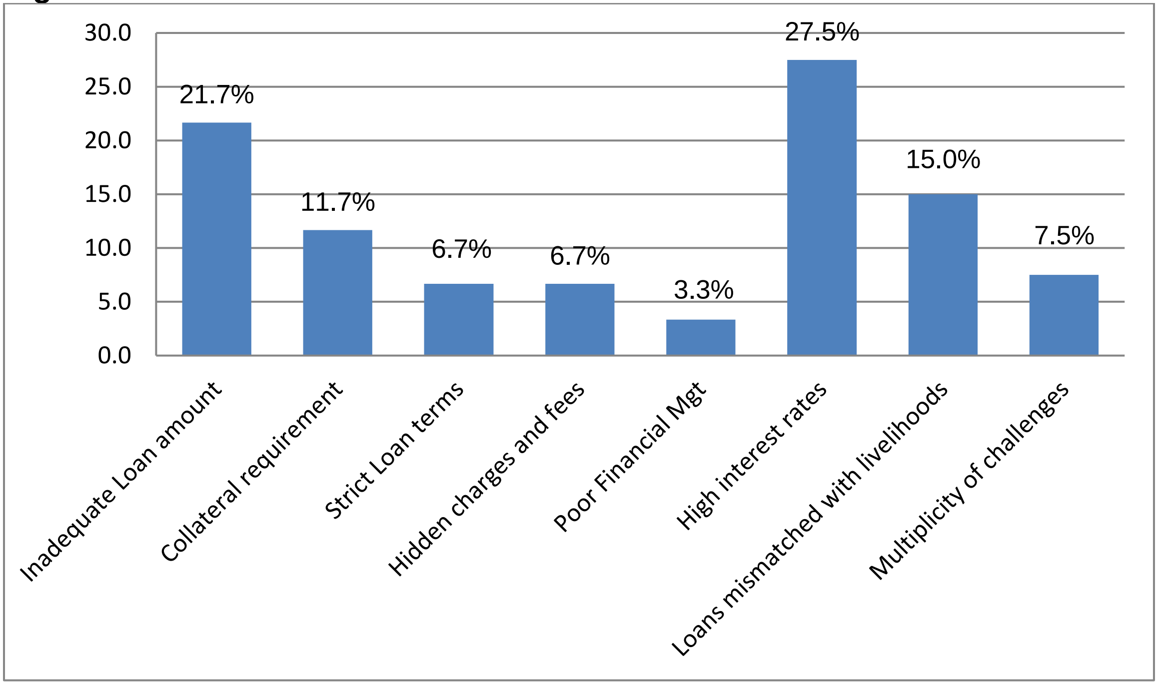
[156] The process of understanding the complexity involves recognising and addressing the obstructions that inhibit markets from beneficially working for the poor.

[157] Strict repayments clauses and too much paperwork required.

mismatched with livelihoods and other challenges (including late disbursements and compulsory savings to qualify for credits).

The study argues that although each cause(s) or obstacle(s) affect clients differently, it is essential to address all the obstacles in totality to generate the required changes in the market system. This is because market systems are composed of different but interconnected structures that influence the interactions between stakeholders. For example, though the role of customers and suppliers may be different, their challenges and opportunities can affect the entire market system. To put this into perspective, a financial institution that gives loans to crop farmers should be concerned about the implications of bad weather on yields, as that might have the potential to undermine the farmers' ability to repay loans.

Figure 7.1 Obstacles to credit access in the microfinance market



Source: Fieldwork Data (2017)

However, the above analysis in figure 7.1 revealed that a majority (27.5%) of the clients[158] associate the causes of their inability to access the microfinance credit market with the high interest rates charged by MFIs. The practice of MFIs charging exorbitant interest rates has received significant criticisms from policymakers and researchers in the industry (Fernando 2006; Bateman

[158] In all three institutions – SAT, CCU and SRB.

2010a). It has also been argued that providing loans at market rates enables MFIs to reach out to more poor clients sustainably.

Nevertheless, high interest rates have also been a source of a disincentive to borrowers, and in some instances contributed to the death of debt-burden clients. This challenge was adequately emphasised, especially by clients of SAT and SRB. It has been argued that rising interest rates on microfinance loans is a breeding ground for exacerbating over-indebtedness among poor clients that sometimes leads to deaths through suicides in some Indian states such as Andhra Pradesh (Shylendra 2006; Mader 2013).

Nevertheless, some 21.7%, 15% and 11.7% of respondents also mentioned inadequate loan amounts, loans mismatched with livelihoods and stringent collateral requirement, respectively as obstacles that impede their access to credit. For example, offering loans in smaller amounts that are inadequate to meet the financing needs of a rural farmer could defeat the whole essence of credits.

Additionally, some clients interviewed indicated that they have had to borrow from multiple providers (including informal sources) to augment loans from formal MFIs. Consequently, these credit practices have exposed borrowers to several small and isolated credit commitments. These potential risks have not been adequately explored – especially when interest rates are reportedly high. Arguably, any of these obstacles can have a knock-on effect on the other, due to their interconnectedness.

The work of Zeller et al. (2001) indicates that 9% of the credit sourced from informal sources was used to offset the existing debts from formal institutions, such as banks and MFIs. Todd (1996) also investigated the sophisticated financial management practices of members of female-only groups of the Grameen Bank. It was observed that clients borrow from formal sources to pay moneylenders and other informal loans and borrow small sums informally to service high-interest-bearing regular loan instalments – consequently getting clients trapped in debts.

The work of Arambepola and Romeshun (2019) admits that the ease of accessing credit from informal creditors and MFIs without credit checks allows some borrowers to join and borrow from multiple credit groups to repay older loans. These adverse loan management practices are due to some of the challenges clients face in the microfinance credit market. As such, considering the critical role of credit in the financial lives of the poor, obstacles in the credit market could undermine the poverty reduction component of microfinance.

Although the challenges discussed above appear to be consistent with similar ones mentioned in the literature (Muhammad 2010; Kassim et al. 2019; Morduch and Ogden 2019), strategies for addressing each obstacle reflect the local dynamics of the market system. The M4P approach is practically relevant when identifying constraints that hinder the functionality of the market system. The M4P approach helps agencies and various market players implement different tools and to adequately understand the interventions that work for the poor in the market system (Tschumi and Hagan 2008b). The way forward to addressing some of these challenges spotted in the core market by clients is discussed next.

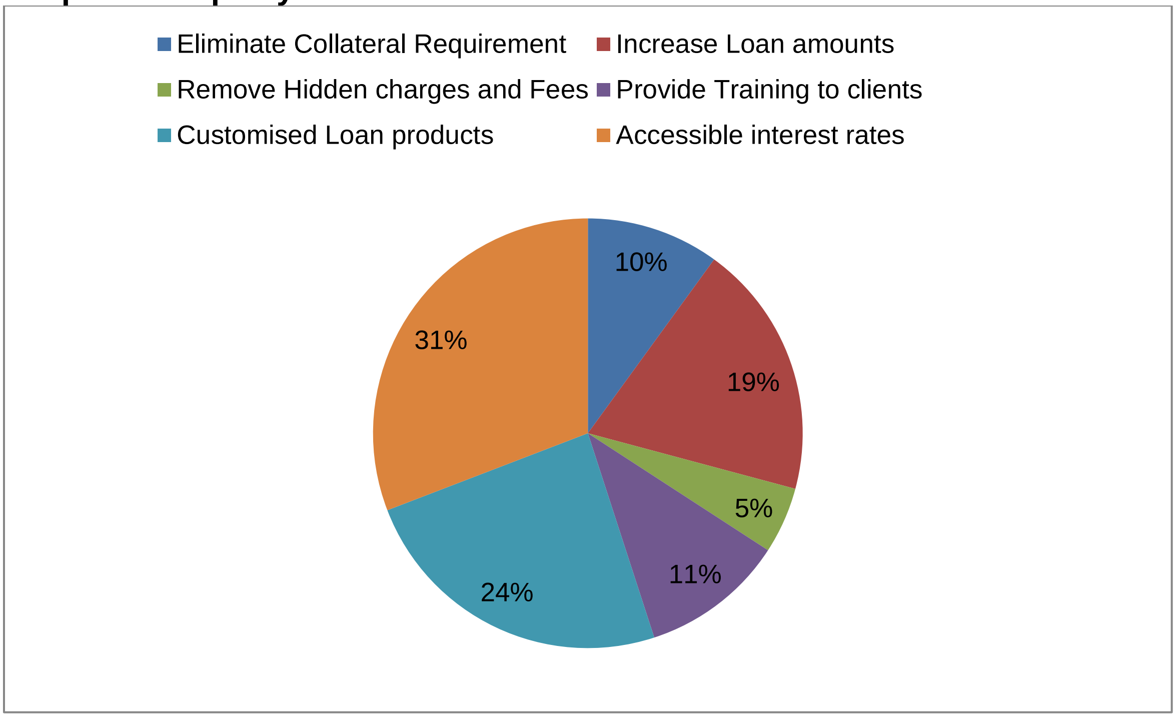
7.1.1.2 How can the microfinance credit market be designed to work effectively for the poor?

Addressing the factors that undermine poor people's access to microcredit contributes to financial deepening. Indeed, the underdevelopment of the rural financial markets is particularly amplified when poor people cannot access credit. The context under which the rural poor live in the research area is characterised mainly by low population density and the uncertain climate subject to more significant seasonality in livelihood activities and income sources.

As discussed in previous chapters (five and six), the design of customer-centric products and services must take into account the unique contextual issues of clients. The search for alternatives to make microfinance interventions more socially responsive to the plight of the poor remains a topical issue in the literature. However, the pursuit of other options and solutions to the challenges that saddle microfinance have mostly taken a general outlook rather than a case-specific nature (Parikh 2006; Jose and Chacko 2017). For example, however, high interest rates on microcredit appear to be a frequently cited obstacle to financial access in developing countries, the underlying solution may differ from one context to the other. A customer-centric[159] organisational approach is critical for solving a core challenge in financial inclusion: the access-usage gap (Kilara and Rhyne 2014).

Figure 7.2 below shows a synthesis of clients' perceptions on how to address the obstacles they face in accessing credit from their MFIs. For this study, respondents were asked about the way forward to addressing their obstacles, since they understand their circumstances better.

Figure 7.2 Removing the obstacles in the microfinance credit market in Jirapa municipality



Source: Fieldwork Data (2017)

The analysis in figure 7.2 reveals that a majority (31%) of the respondents said charging accessible/affordable interest rates on loans would enable the active participation of clients in the credit market. Indeed, the position expressed by the majority of clients during interviews suggests that the high interest rates not only discourage loan applications but also limit the entrepreneurial potential of many rural SMEs. One interviewee was quoted as saying:

[159] Customer-centricity is about providing solutions based on an in-depth understanding of customer needs, preferences and behaviours.

> "The interest rates on loans are too high; all our farm proceeds go into paying for loans. It is like we are just working for the financial institutions" (Chorbaar, SRB).

The above interview response was also corroborated by clients from SAT and CCU, with most clients demanding accessible/affordable interest rates on loans to enable them to support their household and businesses. The calls for MFIs to lower interest rates and related transaction costs on loans have gained tremendous attention, following the economic transformation of microfinance interventions (Singh and Kapoor 2019).

There have been numerous policy requests on how to address the constraint of high interest rates in microfinance. Indeed, some clients suggested an interest rate ceiling on loans to encourage access. On the policy front, the issue of interest rates needs to be carefully managed to avert unintended consequences arising from interest rate restrictions. Any policy attempt to address the high interest rates on microfinance loans must not seek to impose rate ceilings as that could retard the growth of the MFI industry.

In the context of the Jirapa municipality, the availability and access to formal financial institutions are limited. Consequently, interest ceilings are likely to result in a reduction in the supply of microloans and other financial services, thereby damaging rather than helping the poor and low-income households. There is a need for common ground to address the challenge of interest rates across the board.

Admittedly, interest rates on loans are relatively high in Ghana, and particularly alarming in the microfinance sector. Addressing the fundamental causes of high interest rates will consequently make credit accessible to poor and low-income earners. The government and policymakers should take decisive efforts to overhaul sectoral issues that undermine the accessibility of the microfinance cost of capital.

To this end, more practical measures should be pursued and implemented to reduce microcredit interest rates sustainably in the Jirapa municipality. Such measures could include promoting an enabling environment[160] for MFIs and

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[160] Promoting a sound macroeconomic environment that ensures price stability – control of inflation.

other RFIs to strive, encouraging the entry of diverse categories of development finance institutions[161] into the industry – with the view to enhancing the foundation of competition in the microfinance markets.

About 24% of respondents indicated that MFIs should design customised loan products – to reflect borrowers' livelihood activities. Indeed, clients bemoaned the standardised nature of loan terms, mainly when clients are engaged in different livelihoods and subject to various vulnerabilities and seasonality. Some interviewees added that stringent loan repayment schedules undermine the effectiveness of loans, especially when repayments are not matched with the business cycle.

Similarly, loan amounts that reflect clients' needs can have implications for poverty reduction. In some circumstances, smaller amounts are needed by poorer clients to patch their livelihoods together. However, depending on the nature of livelihood activities in the study area, relatively large amounts may be needed to be effective at improving both household and business outcomes. The issue of loan size appeared topical among some clients during the fieldwork. Around 19% of clients indicated that MFIs should increase the loan amounts accessible to borrowers in some livelihood activities. They contend that relatively large loan amounts would support their multiple livelihood investment options typical of rural economies in Northern Ghana[162].

Previous analysis[163] shows that small loan amounts ranging from GHs500 and below had negative implications for clients' household and business outcomes. Some interviewees suggested that small loan amounts were more likely to be spent on household food consumption rather than for productive investment purposes.

Though clients acknowledged the importance of consumption smoothening, they also highlighted the need for MFIs to view poor clients from the perspective

[161] Formal financial institutions are limited in Jirapa, with the supply of services largely concentrated in the municipal capital. As at the time of the research, there were four institutions operating, namely: CCU, SAT, SRB and GN Savings and loans company.
[162] The rural economy of Northern Ghana is characterised by multiplicity of livelihood activities – crop and animal farming, and petty trading pursued concurrently to eke out a living. Pursuing multiples of livelihood options has become more important in Northern Ghana, particularly in the study area as a mechanism to cope with the adverse implications of climate change.
[163] See section 6.6.2 in chapter six: Loan Amounts and Implications for Clients' Poverty.

of potential producers and not merely consumers. It is noted that poor clients have always been viewed as consumers only rather than potential producers or sellers in the market system. It is believed that when consumers are treated as potential producers, it exposes new opportunities and benefits to the entire market (Prahalad 2014; Nagy et al. 2019).

Consequently, this long-held perception of poor clients in the market system has contributed to the prevailing constraints in products and services offered to them in the core market. The Grameen microfinance model –which most MFIs copied – was designed with the conceptual understanding that the poor needed little amounts of credit. Currently, markets have evolved; the needs of the poor have also transformed consistently with their changing livelihoods. It is relevant for MFIs to design loan terms that allow their clients to access relatively large lump sums for productive investment purposes. Arguably, clients postulate that access to substantial loan amounts would enable them to leverage scale in their productive activities to contribute to local economic growth and poverty reduction.

Additionally, 11%, 5% and 10% of clients suggested the following actions: providing training, removing all hidden charges and eliminating collateral requirement respectively. Accordingly, such changes in the credit market would help address some of the constraints that impede poor clients' access. Indeed, these aforementioned intervening strategies are not uncommon in the literature on microfinance. Bond and Rai (2002) call for MFIs to introduce collateral substitutes such as credit denial and Hendricks and Budree (2019) innovative systems of a mobile-enabled structure of credit scoring in place of physical collateral.

While Sinclair (2012) encouraged MFIs to systemically reduce or eliminate hidden charges in loan processes to make microfinance work effectively for poverty reduction, similarly, Cohen and Nelson (2011); Drexler et al. (2014) also recognised the need for clients to be given the requisite training on financial and business management – especially relating to accurate record-keeping of business transactions.

Context does matter. It is critical for financial institutions, especially RFIs, to consistently design well-tailored credit services that have the potential to help clients meet daily needs and achieve household and business goals. Most importantly, rural financial products and services also need to build resistance against livelihood vulnerabilities in the context of Jirapa.

In effect, addressing the constraints that prevent poor clients having the necessary access to microcredit ensures a change in the market system. Nevertheless, such changes in the market system should recognise poor clients as potential producers (as investors) and not necessarily consumers of credit. When clients are perceived as potential producers, it enables services to be tailored to their activities that can generate commensurately more significant tradeable outputs.

7.1.1.3 Underlying constraints with microfinance savings product: a client perspective

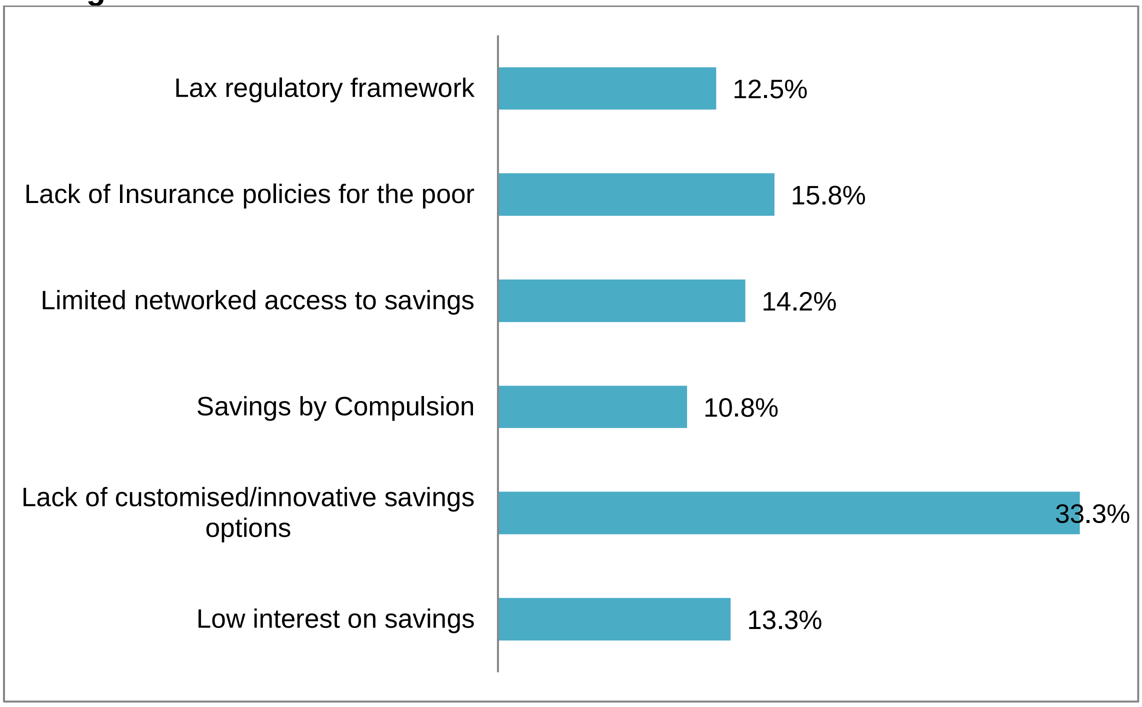
The development of flexible and customised savings remains neglected in microfinance. Indeed, the formative years of microfinance through the Grameen model placed emphasis on microcredit allocation with little attention given to savings by the poor (Vogel 1984). However, Stuart Rutherford's work on 'The poor and their money' totally revolutionised the development thinking regarding the savings potential of the poor. The work of Collins et al. (2010) contends that the poor in many developing countries can save and do have the appetite for building up their savings to address various life circumstances.

Ideally, different financial tools should serve different purposes. While borrowing provides a variety of financing options to smoothen consumption, and for productive investment, insurance is linked to protection against livelihood risk, and savings help with building lump sums for the future. However, the poor in most jurisdictions in developing countries do not have the benefit of access to the variety of financial tools for different purposes (Zeller and Sharma 2002).

Although the three institutions under review in this study offer savings products, they were mainly not enough to address the variety of livelihood needs. As such, most clients in the study were observed to use inappropriate financial tools to address different needs – managing underlying cash flows, coping with livelihood risks and raising lump sums. As a result, clients in the study area have sought to employ ingenuity through informal savings products – ASCAs, ROSCAs – to manage their day-to-day livelihood needs.

Chapter five of this thesis observed that clients saved for various purposes (see table 5.17). Even though clients acknowledge the importance of savings in their financial lives, analysis in chapter six indicates that there are some critical components missing. However, which are the constraints that undermine the savings potential of the poor? Figure 7.3 below shows an analysis of the constraints that impede the effectiveness of microfinance savings products.

Figure 7.3 Constraints that affect the effectiveness of microfinance savings



Source: Fieldwork Data (2017)

As mentioned earlier, an essential element of the M4P approach is the analysis of constraints – not symptoms that undermine the functionality of market systems. In this direction, the study revealed that 33.3% of clients indicated a lack of customised/innovative savings products as the major challenge that undermines their ability to drive maximum benefits savings products.

Nevertheless, evidence suggests that most poor clients use similar savings tools to manage virtually all their savings needs. Some clients bemoaned that their inability to save up lump sums for investments was because they relied on the same pool of funds to smoothen consumption and to avert or manage livelihood risks.

Moreover, another 15.8% of clients established that the lack of appropriate insurance products, designed and targeted at poor clients, had been a challenge to the efficacy of existing microfinance products in the study area. The clients alluded that their financial lives are full of episodes of unanticipated household and business emergencies which they face without any available formal coping strategies. According to some clients interviewed the lack of insurance policies to help manage these emergencies/risks as they occur have often left poor households powerless, with limited or no risk management options. Previous analysis in chapter six established that a majority of clients[164] (52%) perceived their coping strategies to emergencies to be negative[165].

The lack of insurance policies to meet the needs of the rural poor can also derail the long-term benefits of savings and consequently contribute to keeping the poor in a vicious cycle of poverty. This proposition was confirmed in an interview with a client[166] of CCU, who recounts how he slipped back into poverty after a motor accident that rendered him unable to work. Consequently, the client's accumulated savings were used to cover the remaining part of the loan. Unfortunately, with no savings, this client can neither access credits nor invest in income-generating activities to build up the required savings.

The above client's story shows how the poor are susceptible to poverty in the absence of specialised financial tools, such as insurance. Collins et al. (2010) hold that poor communities live with vulnerabilities as a matter of sequence in their daily activities. Dealing with health-related risks among households is

[164] See figure 2 in chapter six.
[165] For the purposes of the study, clients considered sale of household food grains, sale of assets/livestock and the use of savings as negative coping mechanisms, as these strategies affected the household's ability to accumulate savings and assets for productive investments.
[166] Mr Dery, a retired civil servant, was unable to service the remaining 10% of a loan facility from CCU, owing to the accident, therefore leading to his savings being used to recover the loan.

invariably a financial risk. There is a need to approach the issues of the poor with the power of understanding their poverty context and vulnerabilities.

Additionally, some 14.2% of clients also indicated that the limited nature of networked access to their savings accounts when they travel out of the Jirapa municipality was a source of concern that demoralises the savings drive of clients. This concern was particularly profound among traders, who in their line of business travel to other parts of the country to buy and sell merchandise. Clients' inability to access savings accounts through the network of MFIs or other financial institutions has exposed clients to several risks[167] associated with transporting and handling lump sums. In terms of network access through branch connectivity, SAT appears to have national coverage, although with less branch availability.

As at the time of this study, there was only one operational branch/office for SAT in Jirapa. SRB is currently connected to the network of RCBs in the country, through the Ghana Rural Bank Computerisation and Interconnectivity Project (GRBCIP). However, access through network connectivity is limited to only RCBs in the country, therefore making access difficult in communities without RCBs or branch offices.

There were only two operational branches[168] of SRB in the entire Jirapa municipality at the time of this study. In the case of CCU, access to clients' savings is limited to the only functional office in Jirapa town. The current operations of CCU do not enable clients to make transfers and payment services to non-CCU beneficiaries or persons.

Furthermore, 13.3%, 12.5% and 10.8% of clients mentioned low interest on savings, lax regulatory framework and savings compulsion, respectively, as constraints to their savings drive. Regarding interest on savings, some clients were discouraged from saving due to the relatively low-interest income paid by MFIs. Indeed, some bemoaned the large variance between interest charged on credit and that which is paid on deposit accounts.

[167] Recently, armed robberies and petty thefts have become rampant and are a source of risk to many, including clients transporting cash during business travel.
[168] The Jirapa town branch (also serving as the head office) and the Hain agency office – located about 43km from the municipal capital.

Recent debates on interest margins have emphasised that abnormally high margins can be a type of mission drift in microfinance (Mersland and Strøm 2010). During FGD with a farmers' group in Boo/Tizza, most clients bemoaned that they received low or no interest on their deposits with CCU. Indeed, one of the participants attempted to compare CCU's interest on savings to a similar savings account with a different financial institution (Lawra Area Rural Bank Limited) and concluded that the latter paid more interest than the former.

Also, laxity in the regulatory framework for microfinance operations in the study area, particularly relating to deposit collection by unregulated entities, continues to undermine client confidence in the system. Although all three MFIs used in this study have the requisite licence for deposit mobilisations, a significant number of people continue to lose their deposits to unregistered entities undertaking deposit collection activities. Such entities operate under the grey areas of the regulatory framework, exploiting unsuspecting clients from regulatory arbitrage[169].

For example, in Ghana, some MFIs are licensed to undertake tier 3 microfinance activities, but they end up operating as tier 2 or tier 3 entities. Tier 3 MFIs are not allowed to take deposits, however, some tier 3 institutions, such as moneylenders and non-deposit-taking non-governmental financial organisations sometimes capitalise on the weak monitoring and supervision of the regulators to collect deposits from clients. These illegal depository activities and their associated adverse effects do not inspire confidence in informal institutions.

The issue of compulsory savings as a prerequisite for clients to access credit was also found to limit the potential and opportunities of savings to clients' future credit desires. According to some clients interviewed, they indicated the inability to use their savings for other purposes, because a low savings balance limits the amounts accessible to clients. Indeed, some clients hold the perception that forced savings[170] practices are a form of collateral substitute

[169] The practice whereby institutions (legal or illegal) capitalise on the loopholes or weaknesses evident in the regulatory system to circumvent unfavourable operations.

[170] To some clients, MFIs are more active with deposit mobilisation at the expense of other equally critical financial services that the poor need. The increased interest in savings mobilisation is hinged on the financial sustainability of MFIs.

aimed to induce loan repayments and encourage deposits as a source of finance to MFIs.

7.1.1.4 How can the constraints clients face with microfinance savings products be addressed?

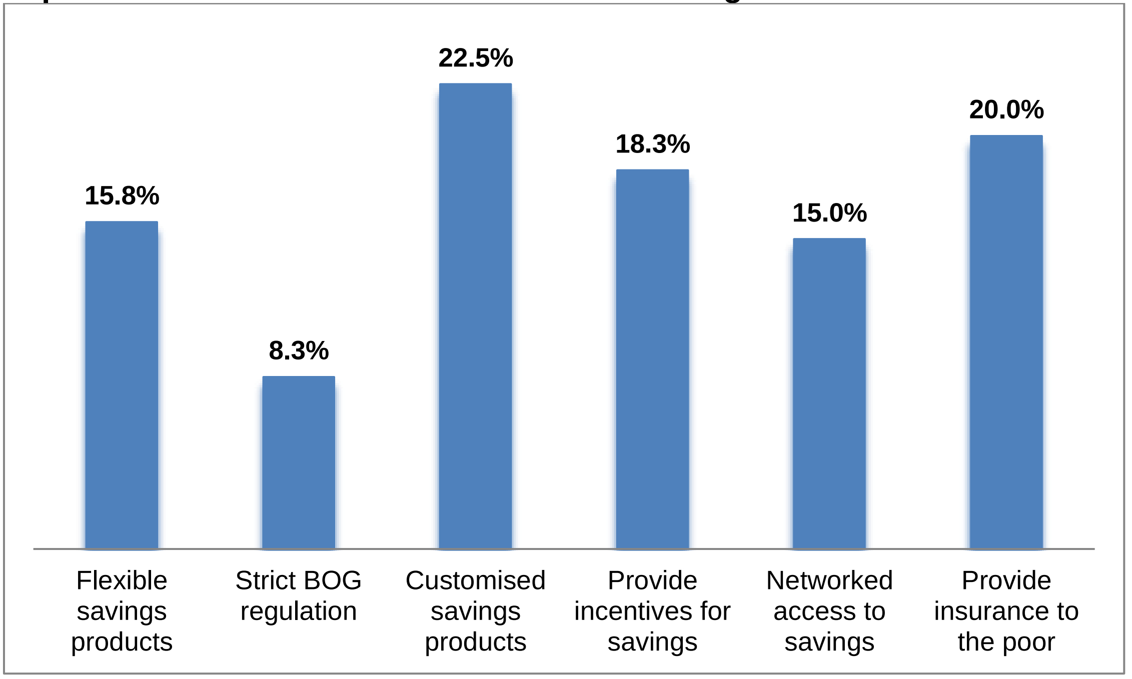
The strategies for addressing the constraints in the microfinance market system, particularly regarding appropriate savings tools, must originate from the people that are most affected by the market inefficiencies. On this score, the study sought the views of clients on the practical ways of mitigating the constraints that impede the effectiveness of savings tools in microfinance.

The M4P[171] approach is concerned with how to meet the needs of people in poverty through the use of market systems. The approach consistently explores how to effectively use private sector actors to transform markets strategies with the view to bring about a long-lasting systemic change in microfinance tools for the poor (Tschumi and Hagan 2008b; Dunn 2013).

Indeed, rather than designing microfinance tools that obstruct the savings drive of the poor, an M4P approach offers a middle ground for both MFIs and clients. It is believed that the poor can participate in all facets of the microfinance market – as consumers, employees, producers or entrepreneurs (Johnson 2005). The M4P attempts to improve their outcomes by reforming the rules to address the market constraints. Figure 7.4 below shows an analysis of strategies for addressing the limitations to the effective functioning of microfinance savings tools.

[171] The M4P approach to market system development for poverty reduction is an all-encompassing means to development that offers actors with alternative routes needed to achieve a broad and sustainable change. The approach concentrates on identifying the core constraints that inhibit sustainable development of market systems to reflect the different contexts of poor people.

Figure 7.4 Clients' perspectives on how to address the constraints that impede the effectiveness of microfinance savings tools



Source: Fieldwork Data (2017)

Following the constraints discussed previously in figure 7.3, the majority of the clients (22.5%) indicated that customising savings products would make microfinance savings tools work more effectively for poor clients. Kilara and Rhyne (2014) agree that customer-centricity is about designing products based on an in-depth understanding of the needs of the poor. As with loan products, so with savings products. Most clients interviewed for this study indicated that MFIs should design savings products that suit their sophisticated financial lives.

About 20% of the clients mentioned that MFIs should provide insurance policies to help the poor manage their livelihood risks. Accordingly, the absence of adequate tools for pooling of risks has led to households deploying harmful coping mechanisms to address livelihood vulnerabilities. Subsequently, with suitable risk management tools available, poor households are less likely to sell stocks of food grains to address household emergencies. Admittedly, implementing insurance products for the poor can be challenging, especially regarding designing suitable policies and affordable premiums (Platteau et al. 2017). The government of India has been supportive of the poor in managing their livelihoods with state-backed social insurance in the form of subsidised group insurance schemes (Collins et al. 2010).

The test case on designing insurance policies for the poor in India came after the liberalisation of the sector in 2001 to allow private insurance providers into the hitherto state-managed Life Insurance Corporation (LIC) and the General Insurance Corporation (GIC). For example, the liberalisation of the sector allowed for poor clients' pay premiums for their life insurance policies according to their age, and also introduced a flexible quarterly or biannual premium payment. The policy also added a feature that allowed the insured to take back their savings with profits after a specified term if the proximate cause did not occur.

Moreover, about 18.3% of clients suggested that MFIs ought to provide some incentives to encourage savings among households. Some clients hold that the interest rates paid on their savings failed to encourage many households to pursue long-term saving plans. As discussed previously, the prevalence of compulsory savings schemes as a precondition for accessing credit undermines poverty reduction. In response to this obstacle, about 15.8% of respondents mentioned that MFIs should endeavour to design and implement flexible savings tools.

Certainly, flexible savings tools allow households to adequately save-up, save-down and save-through, across various stages of their financial lives and for different purposes (Rutherford 2000). It is also amenable to emphasise that well-designed open access savings products, that do not compel clients to leave MFIs or limit their access to loans, are desirable for poor households (Leonard 2010).

Nevertheless, some 15% of the respondents indicated that providing nationwide networked access to savings accounts offered by MFIs will maximise the benefits to clients – particularly SMEs in the rural communities in the Jirapa municipality. The BOG, along with its allied agencies (ARB Apex Bank Limited and Co-operative Credit Unions Association) is beginning to prioritise the role of technology in rural banking.

The ARB Apex Bank has been instrumental in providing network connectivity access to all rural and community banks in Ghana through the Ghana Rural Bank Computerisation and Interconnectivity Project (GRBCIP). However, there is a need for RCBs to establish more branches in various communities to improve access. The CUA is also working towards the implementation of the Credit Union Software (CUSOFT). However, despite the current efforts to provide ICT and technical support to network rural financial institutions, it will be flawed, if it is not complemented with a commensurate branch expansion to guarantee access. It is believed that facilitating proximity in bank branches ensures accessibility of banking services and financial inclusion (Brown et al. 2015).

Lastly, 8.3% of respondents have alluded to strict regulation by the BOG to preclude the illegal operations of persons and entities in deposit collection in the non-bank financial sector. Strict supervision, coupled with clarity in the regulatory framework is essential in ensuring customer confidence in the banking sector. Recently, Ghana's financial sector has been characterised by a significant number of failing banks and MFIs, leading to loss of deposits across the country, including the Jirapa municipality.

Recently, the BOG has intensified its surveillance on such illegal practices in the non-bank financial sector. In the last two years, the BOG has stepped up its regulatory activities and subsequently closed down MFIs operating outside the law. Nevertheless, the new height in market surveillance to ward off illegal activities of entities participating in deposit collection should be sustained by the BOG, and serve as a harbinger of reforms in the regulatory framework to address loopholes. Evidence on the regulation of MFIs contributes to an increased client base (Quartey and Kotey 2019), increases in savings mobilisation and servicing more borrowers (Hartarska and Nadolnyak 2007).

In a nutshell, making microfinance savings and credit products work for the poor requires a deeper understanding of the constraints faced by clients. A thorough understanding of customers' environment enables stakeholders to fine-tune their processes, rules and other supporting functions to address their needs and constraints. Indeed, similar reflections and adjustments put in place to solve customers' constraints in the market system for microfinance are required when dealing with the providers of financial services – MFIs.

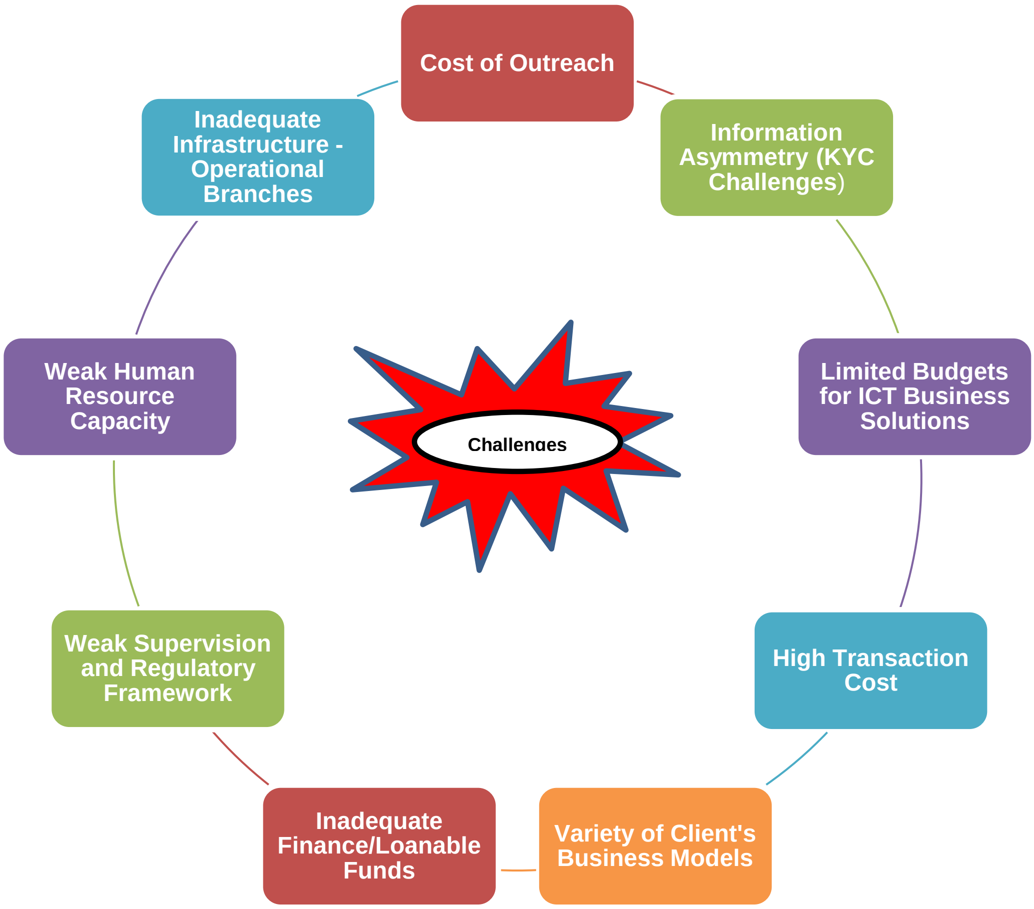
7.1.2 Supply-side analysis: challenges MFIs face and the way forward

It is sufficient to note that a significant scope of discussions on the microfinance ecosystem has considerably focused on the demand side of microfinance. This aspect of the core market analysis delves into the hurdles faced by MFIs and the various strategies of solving such challenges.

7.1.2.1 Challenges confronted by MFIs in Jirapa municipality

To understand the challenges MFIs face, the study conducted a different set of interviews with staff/manager(s) of SAT, CCU and SRB. Figure 7.5 below summarises common institutional challenges that saddle the operations of MFIs.

Figure 7.5 Challenges affecting the operations of MFIs in Jirapa municipality



Source: Author's synthesis from field interviews with MFIs (2019)

The challenges that obstruct the sustainable operations of MFIs are well documented in the literature (Mulunga 2010; Ghosh 2013; Cobb et al. 2016). Similarly, these challenges (figure 7.5) revealed in the study are not uncommon to those previously established in the literature. The consequences of these challenges are felt differently among various institutions, depending on the financial ecosystem they operate. Agreeably, all the institutions involved in the study emphasised the risks and difficulties associated with extending financial services profitably and sustainably to low-income communities due to the challenges they face.

The cost of outreach is one of the foremost limitations faced by institutions providing financial services to low-income groups in the Jirapa municipality. This challenge is made profound due to the scarcely populated nature of communities in the municipality. Indeed, reaching the unbanked in remote and dispersed settlements can be unprofitable without the benefits of financial technology (Fintech) – in process automation and mobile delivery.

The study area (Jirapa municipality), which has a territorial size of 1,188.6km^2 (6.4% of the landmass of the Upper West Region), is served by only four financial institutions. Apart from CCU and SRB, which both have an agency office at Hain (43km from the capital), the others operate solely from Jirapa central. The consensus among the managers of SAT, CCU and SRB, is that reaching the poor has proven costly[172] and difficult to sustain in the long term. Some studies have analysed the trade-off between financial sustainability and outreach, and conclude that the latter could undermine the efficiency of the MFI (Hermes et al. 2011; Lensink et al. 2011).

However, the interviews also recognised information asymmetry as a challenge that obstructs the effective operations of MFIs in the study area. Indeed, the staff indicated that, unlike formal sector borrowers, where information about their business transactions is available, potential borrowers from MFIs had limited personal identification. It can be challenging and risky to provide services in an environment where customer information (Know Your Customer – KYC) is either limited or unavailable. The issue of information asymmetry

[172] At present, all three institutions indicated they spend a significant amount of their budgets on monitoring the performance of loans with debtors in rural communities.

tends to result in adverse selection and moral hazards (Soukal and Hedvicakova 2015). Asymmetric information occurs when there is limited information to assess the credibility of prospective borrowers that could lead to an unsuitable selection of borrowers.

Consequently, the selection of unsuitable borrowers could lead to them using borrowed funds for different purposes, rather than their intended purpose (moral hazard). For example, the staff of SRB indicated that there are some reported cases of farmers diverting loans intended for the purchase of farm inputs (fertilisers and seeds) for consumption purposes.

Nevertheless, management also indicated that their respective institutions face the challenge of limited internal budgetary allocation to support the development and adoption of the necessary ICT business solutions. The nature of banking has been remarkably transformed with the upsurge in the application of networks of computers to facilitate the transfer of clients' data, information and support in the fast and reliable execution of business transactions (Ledgerwood 2014).

At the time of this study, both CCU and SRB had expressed the need to improve the systems with up-to-date banking software and introduce some form of automation to monitor their credit and savings systems. The manager of SRB had particularly indicated the institution's plan to purchase and install ATMs to minimise the pressure in the banking hall. Both CCU and SAT also recognised the importance of introducing technology in evolving the quality of service delivery to their mostly rural clients.

However, the lack of technology to facilitate financial intermediation in a predominantly rural and scarcely populated environment is a contributing factor in the rising cost of transactions. Reducing the cost of doing business with the poor is a boon for financial sustainability among most modern MFIs. During separate interviews, managers of the three MFIs indicated that the high transaction cost in providing financial services to the poor is a daunting challenge. They further added that the volume of customers' transactions was relatively small, whereas the fixed cost of these transactions remained high. A typical example cited was that monitoring several small loan customers requires regular visits by a credit officer, an exercise they described as expensive and unsustainable. Maino et al. (2019) suggest that Fintech offers the potential to strengthen and accelerate financial inclusion and reduce the cost of extending financial services to poor communities.

Despite the relatively small volumes of customer transactions and the associated high cost, MFIs are increasingly confronted with the challenge of extending financial services to rural areas in Jirapa due to the variety of clients' business models. Inasmuch, although designing financial products to meet the varying customer needs is crucial to improving customer-centricity, implementing that has been challenging to the management of MFIs in the study area. Indeed, supporting the plethora of business features and lending activities of clients demands a considerable amount of management efforts and substantial cost implications.

This challenge is further exacerbated by the limited financial or loanable funds available to all three institutions involved in this study. Following the recent decline in donor funding to the microfinance sector, most MFIs have sought to bridge the financing gap through commercialisation of their service delivery. Consequently, most institutions are confronted with a challenge on how to sustainably service poor clients in an increasingly commercial environment plagued with inadequate loanable funds (Dorfleitner et al. 2019). To this end, management indicated they have had to use diverse strategies[173] to remain relevant to their social motive of poverty reduction.

Setting up regulatory frameworks is a boon for conformity and standardisation. Regulating the activities in the financial sector ensures that both customers and institutions all play by the rules stipulated by the regulator. However, weak supervision and regulatory framework are identified by the management of SAT, CCU and SRB as a challenge that undermines customer confidence[174] in the financial sector. Indeed, the staff pointed to the proliferation of various MFIs, with fraudulent operational strategies aimed at mobilising deposits from

[173] For example, CCU established an institutional arrangement with a United Kingdom crowd-funding charity to raise funds through the 'Deki Loans' initiative. See more on Deki Loans in the subsequent section on supporting functions.
[174] The past four years have witnessed the proliferation of several MFIs, mainly operating in the rural areas of Ghana. The operational methodology of most of these MFIs was hinged on mobilising deposits with the promise of high (in most cases unrealistic) returns – averaging 140% interest income, per annum.

unsuspecting customers. Such activities have led to significant loss of deposits of many clients to these fraudulent schemes – registered as MFIs with the regulator (Bank of Ghana).

In all these, the various managers asserted that the weak supervisory arm of the BOG and other allied agencies have previously failed to identify and stop those that were operating illegally. In effect, the management of the SAT, CCU and SRB claimed that most potential and existing clients have become somewhat sceptical about the security of their deposits even with traditional institutions such as the credit union system and community banks.

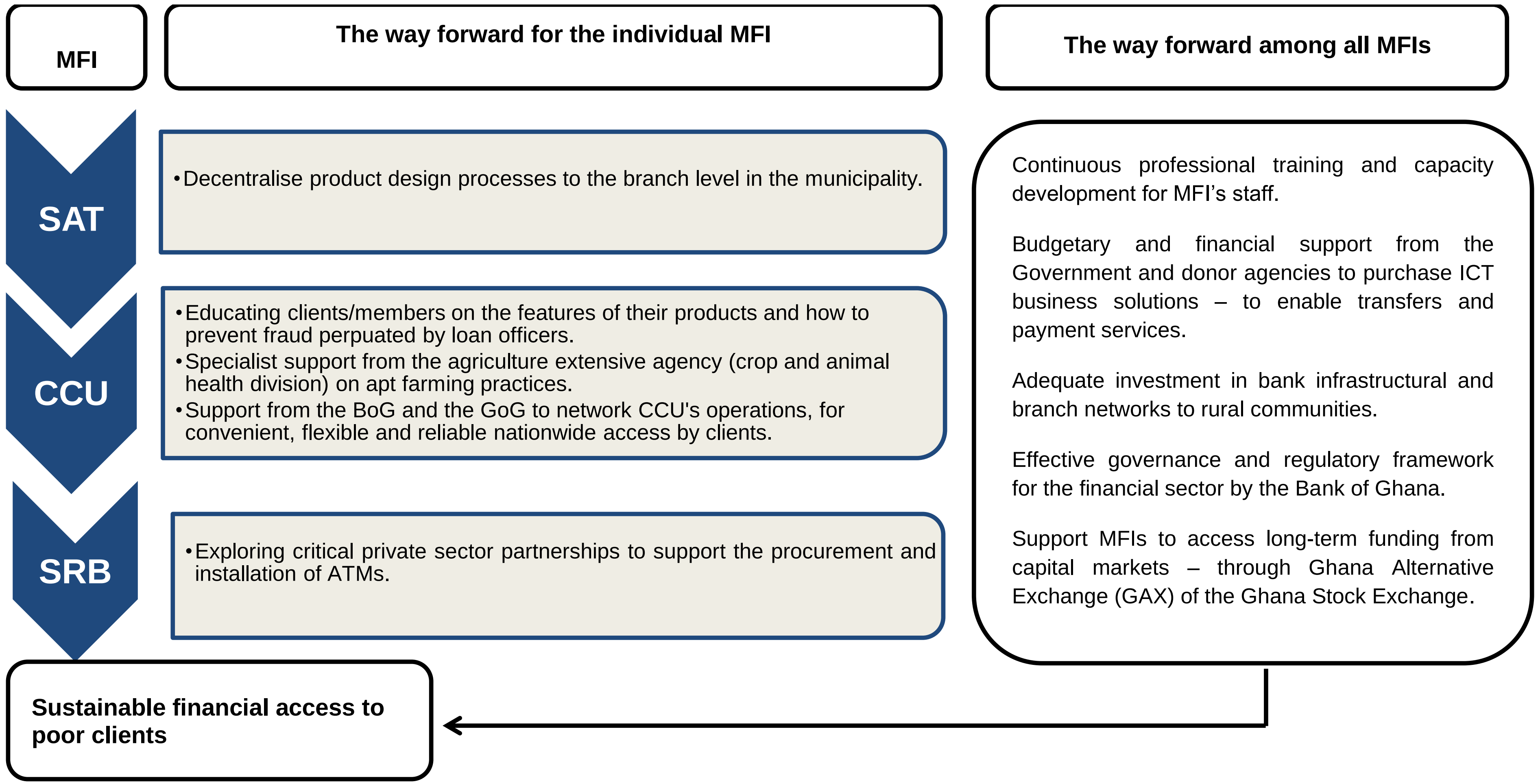
The role of financial regulations and effective supervisions cannot be overemphasised. Chen and Divanbeigi (2019), in their work, tested the relationship between regulatory quality and financial inclusion. They conclude that countries with regulatory quality in the top quartile are 12.4% more likely to benefit from financial inclusion relative to countries within the bottom quartile. One plausible reason for this is that effective regulations and supervision help to maintain customer confidence in the financial system.

Similarly, inadequate human resources capacity was identified as a weakness that undermines the operations of MFIs in the Jirapa municipality. The practice of banking is a professional enterprise, as such, the paucity of quality human resource capacity could undermine the success of microfinance product design and implementation for poverty reduction. According to management accounts, limited budgetary allocation for staff emoluments means MFIs were unable to appeal to quality human resource capacity. Alas, the relatively low levels of staff emoluments have contributed to high staff turnover, where employees leave for better incentives elsewhere. Nevertheless, the paucity of human resource capacity for MFIs in the Jirapa municipality is worsened by inadequate infrastructure and operational branches for the various MFIs being studied. Currently, CCU and SRB only operate one agency office beside their main operational offices in Jirapa Township.

7.1.2.2 The way forward: tackling the challenges that face MFIs in Jirapa municipality

Following the discussions on the challenges besetting MFIs, figure 7.6 below synthesises strategies from the perspective of the staff of MFIs on how to make microfinance work effectively. Agreeably, most of the prescribed strategies for the way forward were mutually consistent across the three institutions. Figure 7.6 below shows the way forward to addressing some of the challenges that confront MFIs in the Jirapa municipality.

Figure 7.6 The way forward to addressing challenges facing MFIs in the Jirapa municipality



Source: Author's synthesis (2019)

In the pursuit to make microfinance a useful tool for the continuous fight against poverty, MFIs need to be operationally sustainable, to be able to keep up to this social mission. As indicated in the above figure 7.6, it is essential to MFIs to establish new avenues to fund the modernisation of microfinance operations to meet both its commercial and altruistic motives.

As is evident in the interviews with MFIs, access to long-term finance is undoubtedly the major theme that recurred in the discussions on the way forward for MFIs in the Jirapa municipality. Indeed, with the available funding, MFIs in the municipality will be able to invest in branch expansion, procure world-class banking technology and also provide continuous professional development to their staff.

To this end, more effective collaboration between the government and the private sector is needed to enable MFIs to access both domestic and international capital markets. Mersland and Urgeghe (2013) suggest that MFIs should be supported to access international debt markets as an alternative to bridge the funding gap. Moreover, they further posit that international financing is considered an essential engine for growth.

Nevertheless, attracting external debt funding calls for MFIs to improve their professionalism in record-keeping and financial reporting standards (Mersland and Strøm 2009). In this direction, the BOG could play a crucial role to standardise the operations of MFIs and further ensure effective regulation. Currently, the BOG is undertaking a significant level of reforms to address loopholes in the regulatory framework that undermines confidence in the microfinance sub-sector in Ghana.

However, beyond identifying and addressing the challenges in the core market of microfinance, supporting functions of private sector actors, informal networks and the government is essential in managing partnerships between customers and MFIs for sustainable poverty reduction.

7.2 Supporting functions and rules: improving performance in the microfinance market system

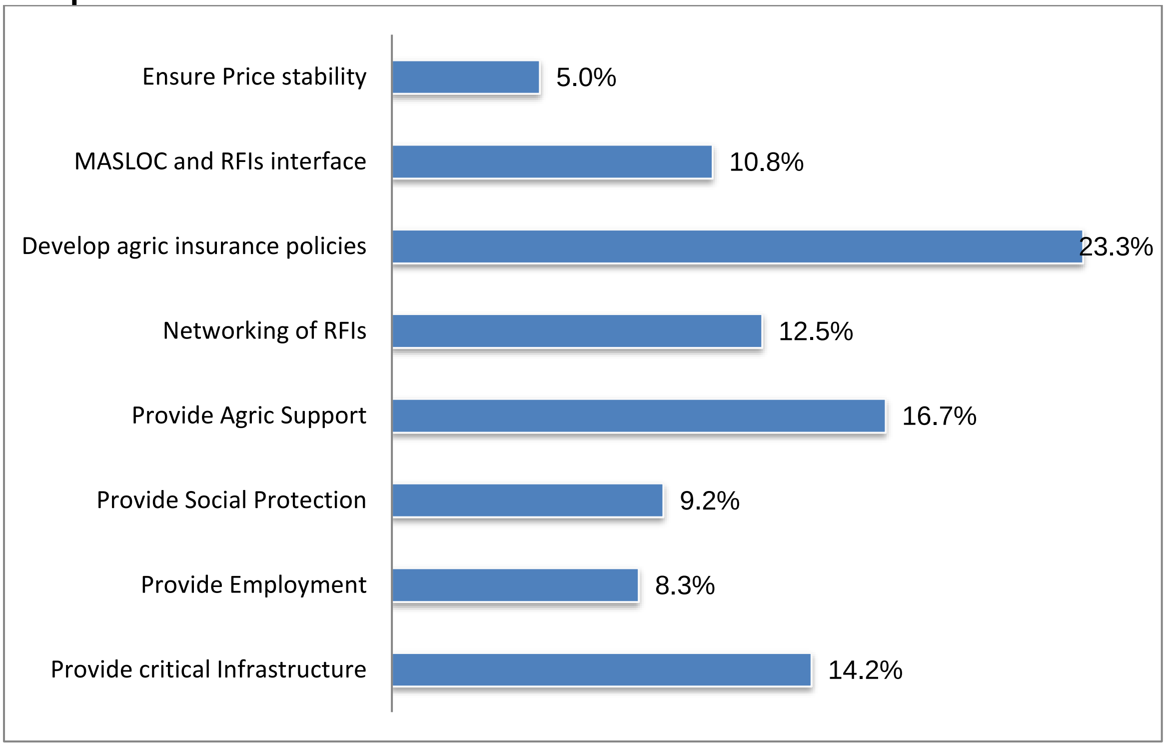
Market systems are complex – comprising of multi-faceted actors, networks and regulations. As such, it is fitting to always take into consideration the supporting functions and rules that are necessary to improve the performance. The supporting functions and rules must be viewed as critical complementing ingredients needed for effective facilitation of the transactions between customers and suppliers (Tschumi and Hagan 2008a). How can the government and the private sector contribute to make microfinance work for poverty reduction in a sustainable manner? The study analysed the views of clients and MFIs on the complementary services that are needed to boost the operations of microfinance in the study area.

7.2.1 Government support for microfinance in Ghana: what is needed in the context of clients of MFIs in Jirapa municipality?

The financial sector has always gained chequered support from the government of Ghana, mainly aimed at improving the delivery of financial services to priority sectors, such as agriculture and industry. According to Nair and Fissha (2010), Ghana's government has taken on a significant role in supporting the establishment and promotion of rural financial access. This is particularly evident in the support given to RCBs and with the establishment of MASLOC to boost microfinance financial services.

The government, through the BOG, also continues to make the necessary changes to the regulatory framework that undermines the growth of rural financial institutions and stifles financial inclusion. It is argued that poor communities may also need other non-financial services to augment microfinance services (Group 2006; Lensink et al. 2018). The study also attempted to find out from microfinance clients in the various communities (rural and urban) what government support should entail complementing services of MFIs. Figure 7.7 summarises the perspectives of clients regarding the nature of support required by their communities from the government to augment microfinance services.

Figure 7.7 Clients' perspective on the required government support to complement the financial services from MFIs



Source: Fieldwork Data (2017)

The analysis in figure 7.7 indicates that the majority (23.3%) of clients of the three institutions preferred that government support be channelled towards agricultural insurance policies. According to clients, the debilitating effects of climate change on their livelihoods can be partly managed with some form of risk-pooling mechanisms developed and implemented by the government to help farmers. When farmers make losses (crop failure or animals die) due to force majeure, it affects clients' ability to sustain livelihoods and ultimately dissipates their chances of repaying loans with ease.

Alternatively, some 14.2% of clients also indicated that the government's support should take the form of provision of critical infrastructures, such as roads, market squares, hospitals and other social amenities. While 16.7% and 12.5% of the clients suggest agricultural support for farmers and the networking of all RFIs, respectively, some clients suggest that government should create an interface between MASLOC and RFIs (10.8%), whereas others believe that providing more social protection (9.2%) would go a long way towards augmenting the services of MFIs in the Jirapa municipality. Lastly, some respondents were of the firm view that government should take steps to provide employment opportunities (8.3%), while 5% of the respondents indicated that government should ensure price stability in the economy.

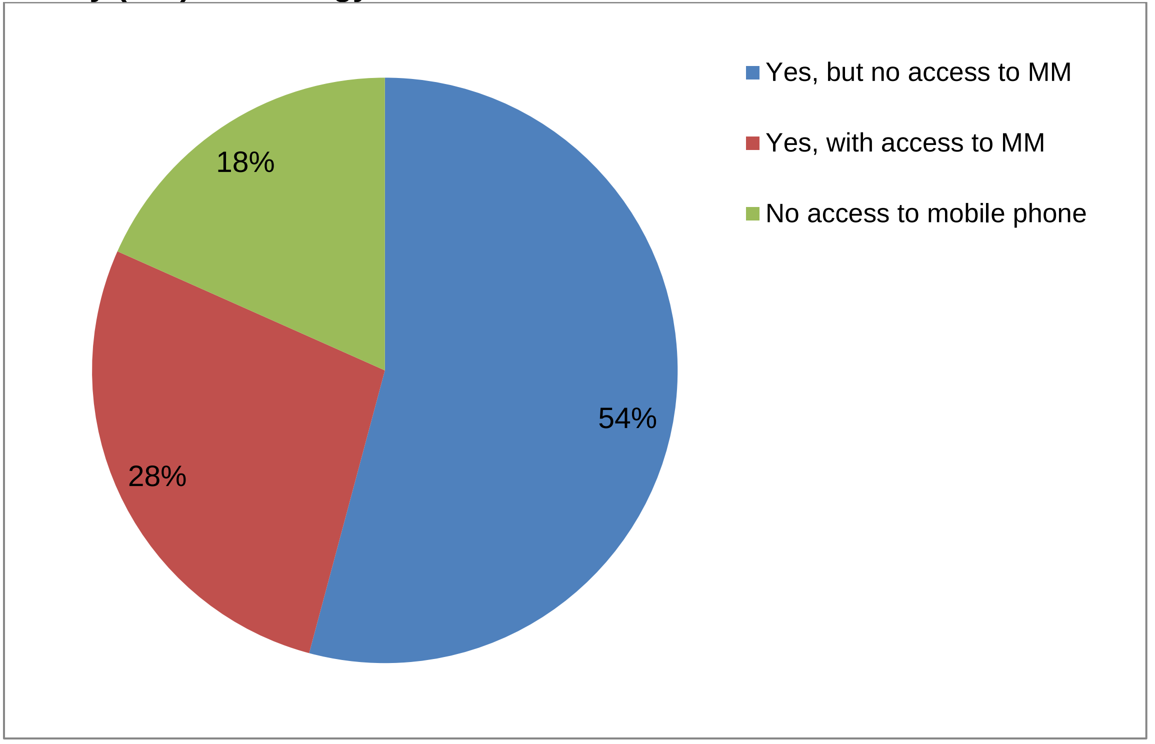
7.2.2 Leveraging financial technology to improve efficiency in microfinance delivery in Jirapa

The IMF (2019) insist that the surge in technology diffusion and application in the delivery of financial services is redefining and shaping how people access and conduct financial intermediation. As a case in point, the proliferation of mobile networks and the increasing availability of mobile phones to households, especially in rural communities, have facilitated a frugal innovation of payment services in the financial ecosystem to reach people that were hitherto excluded.

It also argued that digital financial inclusion[175] has the potential to reduce both outreach and transaction-related costs in financial services delivery (Donovan 2012; Bachas et al. 2018). On this score, exploring the potential of technology in addressing some of the challenges espoused previously in the chapter by both clients and MFIs cannot be overemphasised.

[175] 'Digital financial inclusion' can be defined as digital access to and use of formal financial services by excluded and underserved populations. Such services should be suited to the customers' needs and delivered responsibly, at a cost both affordable to customers and sustainable for providers.

Figure 7.8 Customers' household access to mobile phone & mobile money (MM) technology



Source: Fieldwork Data (2017)

Figure 7.8 above summarises the ownership of mobile phone clients and the use of MM financial services. In total, about 82% of clients owned mobile phones in their households. However, the analysis shows that 54% of clients surveyed indicated they owned a mobile phone but had no access to MM services. Another 18% indicated they did not own a mobile phone, while 28% said they own a mobile phone and registered to MM services.

The above statistics show the potential for Fintech to thrive, given the substantial proliferation of mobile networks and MM agents[176] across rural Ghana (GSMA 2017). In the context of this study, the relatively high percentage of mobile phone ownership (82% clients) shows the viability of MM as an alternative for SAT, CCU and SRB to design and deliver financial services to poor clients. The GSMA (2018) reports that some countries are currently delivering microcredit through efficient MM platforms. The IMF data from its Financial Access Survey (FAS) suggests that Ghana, Guinea, Rwanda, Mozambique and Madagascar are among the major players in leading the next generation of MM in Africa (IMF 2018). As in the context of RFIs delivering

[176] See figure 3.6 on the increasing trend of MM operations in Ghana.

microcredit in the Jirapa municipality, it is believed that as mobile money operations reach scale, new and improved services including loans, credit scoring and insurance can be designed and delivered through this channel on a larger scale with higher efficiency (GSMA 2018).

Mainstreaming Fintech[177] in the design and implementation of financial services can help address some of the challenges previously discussed[178] relating to the high cost of transactions, high cost of outreach and including information asymmetry. Nevertheless, the adoption of Fintech by MFIs in the delivery of financial services does not automatically eliminate institutional contacts with clients but contributes to efficiency[179].

In all these, the regulatory environment to govern activities of MM needs to be adequately rationalised to eliminate loopholes that could undermine user confidence in the platforms. To assure user confidence, governments need to make adequate investments to help identify suspicious transactions and comply with international standards relating to anti-money-laundering (GSMA 2018; Martin 2019).

As at now, some scepticism still exists regarding safety deposits. To this end, Ghana has adjusted the regulatory environment to encourage the use of MM with the recent introduction of the mobile money interoperability by the BOG. Under the aegis of the BOG, a new supervisory guideline has classified agents of mobile money operators (MMOs) under the regulation and supervision of the Central Bank (IMF 2019). It is believed that such development would offer some incentives for MMOs to make critical investments for more excellent coverage with MM services with accompanying job creations – through the recruitment agents across the country (Mattern and McKay 2018).

However, such growth in the MM industry stands to benefit MFIs, such as SAT, CCU and SRB, with a much-needed technological push in their product designs and implementation for poverty reduction. Indeed, management of the MFIs in an interview affirmed that embracing technology in their operations is a sine qua non for achieving sustainability while reducing poverty. Ashta (2018) supports

[177] The application of Fintech in the delivering of loans and savings products would help introduce efficiency in how loans are disbursed and savings mobilised.
[178] See figure 7.5 on the challenges affecting the operations of MFIs in Jirapa.
[179] Indeed, regular loan monitoring remains essential to minimise moral hazards in loan use.

the view that adoption of innovative technologies in microfinance would help to minimise cost, broaden outreach and ensure adequate impact.

7.2.3 Coordination of the activities of MFIs with relevant institutions

Coordination of development efforts is essential to guarantee sustainable poverty reduction from below. National development processes for poverty reduction are often characterised with different formal and informal institutions with different policy goals (Bossuyt and Gould 2000). In the context of Ghana, agencies with decentralised authority to implement various mandates act with little convergence with each other for purposes of improving the economic lives of the poor.

The poor need access to both financial and non-financial services to work themselves out of poverty. The study contends that formal and informal institutions and network working in the poverty reduction ecosystem need to collaborate to make their service much more accessible to the poor.

Building sustainable partnerships between MFIs and other relevant institutions is indispensable for poverty reduction. Currently, some institutions working on various poverty reduction projects and programmes in the Jirapa municipality seldom interact to foster partnerships in areas of common interest. Indeed, even when such partnerships do exist, they are mostly unknown to beneficiaries in the rural communities of Jirapa. As at the time of the study, the following institutions were analysed in relation to their level of collaboration with MFIs operating in the Jirapa municipality:

7.2.4 International Development Enterprises (iDE): training and financing support

The iDE[180] uses the power of business to solve the problem of poverty in developing countries across the world. The operational areas of interest include agriculture; water, sanitation and hygiene; and access to finance. Through its people-centred business models, iDE works to create life-changing

[180] In 2010, iDE began working in Ghana to enable farmers to access improved irrigation techniques that allow for farming in the dry season, leading to increased incomes and food security.

opportunities supported by market-based solutions for low-income people to establish profitable enterprises hinged on their livelihoods.

The entry point for iDE in the Jirapa municipality was in the area of rural agriculture – mainly supporting smallholder farmers with irrigation technology in dry season farming, training in agronomy and financing. In an interview, the programme officer of iDE emphasised the importance of providing training to farmers' groups on appropriate farming practices to help mitigate the effects of climate change on their livelihoods.

Most importantly, iDE has also been supporting its farmer-groups to gain financial inclusion[181] by creating an interface between poor farmers and MFIs in the Jirapa municipality. In this regard, iDE supports the farmer with the preparation of crop or production budgets that are presented to the bank for funding. As at the time of this study, iDE had established a financing arrangement with an international partner – Deki[182] – in the UK to provide small life-changing loans to farmers. Currently, CCU is the implementing partner through which Deki loans are channelled to entrepreneurs.

The manager of CCU confirmed in an interview that support from iDE in the sourcing of funding from Deki has been instrumental in gaining scale in their operations. Although the Deki loans arrangement is currently accessed only by CCU clients, technical training from iDE has been beneficial to SAT and SRB clients. Accordingly, groups formed by the iDE team in the municipality were also found to be more efficient and achieved a much higher loan recovery rate relative to non-iDE groups. It is important to note that, with continuous coordination and productive partnership between iDE, Deki and the various financing institutions are essential to sustain this poverty reduction model. However, with the current rolling back of iDE's projects in the municipality, this necessitates that government agencies are responsible for poverty and the various MFIs to explore options of new partnerships.

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[181] Indeed, through these efforts, most iDE member-groups have had access to savings accounts with SAT, CCU and SRB.

[182] Deki loans are generated through their innovative peer-to-peer lending website; 100% of the money goes to the entrepreneur with no fees or interest charged by Deki. As loans are repaid by successful entrepreneurs, UK lenders then reinvest in the same or other individuals. Lenders can provide as little as £10 in loans.

7.2.5 Effective coordination of the activities of the Ministry of Food and Agriculture (MOFA) for active engagement with rural farmers

The MOFA is the responsible government agency for planning and coordinating development programmes and projects in the agricultural sector in Ghana. The Ministry also has the mandate of formulating appropriate agricultural policies across crop and animal farming, including fish production.

The Ministry has a decentralised structure, with regional and district offices responsible for the implementation of the various policies, projects and programmes. The Directorate of Crop Services and the veterinary services department (VSD) are responsible for providing training and advisory services to farmers on crop production and animal health, respectively. Although these directorates are part of the decentralised structure of MOFA, farmers seldom have access to their services due to lack of information.

In the context of rural dwellers in the Jirapa municipality, these decentralised structures appear to be less effective in the discharge of their services. For example, some clients in animal husbandry indicated they found it difficult to access the services of a veterinarian from the VSD. Similarly, crop farmers[183] also rarely had access to technical advisory services on what to sow, when to sow and how to sow their crops based on soil types and anticipated precipitation levels.

Some farmers indicated that access to these agricultural extension services could improve crop and animal productivity, and subsequently increase the scale of impact of loans accessed from MFIs. The management[184] of the MFIs added that they would consider including agricultural extension services as part of loan services to farmers. Danso-Abbeam et al. (2018) conclude that farmers' access to agricultural extension services in the form of improved farm technologies and other technical advisory services increases farm productivity and household income.

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[183] The Directorate of Crop Services (DCS) is a technical directorate under the auspices of the MOFA with the mandate of providing technical advisory services on soil management, water resources and sustainable agricultural production in Ghana.

[184] The manager of CCU added that it was much easier for management of financial institutions to request the agricultural extension services on behalf of their customers. The manager further intimated that "animal health and crop failure constitute potential financial problems that could undermine the ability of clients to repay loans".

7.3 Chapter summary

The study assessed the constraints that undermine clients' ability to access credits from SAT, CCU and SRB. High interest on loans, small loan sizes and the mismatching of loans with clients' livelihoods, were established as the leading constraints. Some of the prescriptions to address these constraints included that MFIs should charge accessible interest rates and tailor loan products parallel to the livelihood needs of clients.

The perceptions of clients vis-à-vis the savings products offered by MFIs were also analysed. Consequently, lack of tailored/innovative savings options, lack of insurance policies for the poor and limited networked access to a savings account, were revealed as constraints with profound implications on clients' ability to save. The clients also believed that designing savings products to reflect the needs of clients, providing access to affordable insurance policies for the poor and more savings incentives would stimulate clients to participate adequately in the savings market.

Several challenges, including cost of outreach, information asymmetry, high transaction cost, limited budget for ICT business solutions, weak supervision and regulatory framework, among others, were cited by MFIs as impediments. The management of SAT, CCU and SRB suggest that supporting MFIs to access long-term finance, strengthened regulatory environment, adequate investment in infrastructure – including ICT – among other initiatives are essential. The chapter also revealed that government support is needed to complement the services of MFIs for effective poverty reduction in the Jirapa municipality. Appropriate investments in Fintech and effective coordination of poverty reduction efforts of other agencies and partnerships are essential ingredients needed to make microfinance work sustainably for the poor.

CHAPTER 8

CONCLUSION: SUMMARY AND RESEARCH FINDINGS

8.0 Introduction

The research delved into the microfinance operations of three institutions: Sinapi Aba Trust (SAT), St Joseph's Cooperative Credit Union (CCU) and Sonzele Rural Bank (SRB) in the Jirapa municipality of Ghana. The study examined how microfinance products are designed and implemented empirically, and the implications for poverty reduction. It argued that product and implementation designs that reflect the livelihood needs and poverty context of clients have the potential to reduce poverty. This chapter revisits the problem statement, including the objectives and questions of the study. It summarises the methodological stance, as well as presenting the main and significant findings established in the study. The chapter also summarises some of the limitations of the study and finally suggests an area for further future research.

8.1 Summary of research problem, objectives and questions

Fundamentally, the origin of microfinance is often akin to poverty reduction. The logic that supports the development of the microfinance industry has been that access to microfinance services helps reduce household poverty and improve livelihood outcomes. Several studies have attempted to test the veracity of this claim, but the results have been contentious. Nonetheless, the discourse that is emerging suggests that the main benefit of poor households' access to financial services is that it contributes to building resilience, supporting households to anticipate their livelihood shocks and develop adaptation mechanisms to recover from the adverse effects of such shocks. It is believed that such resilience would shield livelihoods and consequently reduce the chronic vulnerability that undermines growth.

Current discussions emphasise that the commercialisation drive of MFIs is a means to reach many clients and to reduce poverty. Conversely, it is argued that the commercialisation drive of MFIs has led to a conceptual change of focus from the poor. An essential aspect in the literature of microfinance that has not been adequately examined is the product and implementation designs, and of MFIs. As such, given the limited current state of knowledge on this aspect, the study aimed to examine how microfinance products are designed and implemented empirically, and the implications for poverty reduction.

This research was carried out on the backdrop that some MFIs have often designed their products in one way, while the actual implementation targets a different set of clients. This challenge causes implementation gaps – that need to be bridged for effective poverty reduction. To this end, the study argued for the design and implementation of microfinance products and services that reflect the livelihood needs and poverty context of clients. In line with the research gap, the main objective of the study was: to examine the design of products and the implementation processes of microfinance from an institutional and client perspective, and the implications for poverty reduction.

However, the central objective of the study was sub-divided into three sub-objectives to address specifics issues. These sub-objectives included: (i) to examine microfinance product design processes and their actual implementation from an institutional and client perspective; (ii) to assess the effects of various microfinance product components and channels of implementation on poverty outcomes; (iii) lastly, to determine how MFIs' products and services can be designed to work effectively for the poor, taking demand and supply factors into context.

Following the above research problem and the enumerated objectives, the study formulated the following central research question with the view to help address the gap in the research: What are the key factors that influence how micro-finance products have been designed and implemented in Northern Ghana and to what extent these have impacted on the levels and the nature of poverty of the clients? This question was divided into the following sub-questions: (i) What are the various factors that influence how microfinance products are designed and implemented in Northern Ghana? (ii) How and to what extent do the various designed microfinance products and channels of implementation affect clients' poverty? (iii) What are the implications for designing and implementing microfinance products and services for these to work effectively for the poor in Northern Ghana? The study believed that answers to the sub-questions would help answer the main question, and ultimately help achieve the objectives of the study. Following this logic, chapter five addressed the first sub-question, while chapters six and seven answered the second and third.

8.2 A summary of the thesis

The first chapter of the thesis presented the introduction to the thesis. It covered the background of the study, problem statement, research objectives and research questions. The chapter also summarised the scope and delimitation of the study, justifications of the study, as well as the structure of the research.

Chapter two reviewed recent and relevant literature on the microfinance landscape. It delved into the evolution of microfinance interventions and poverty reduction, revisited current debates on microfinance and new directions in the literature. Revisiting the evolution of microfinance enabled the study to appreciate the changing development paradigms and to build an understanding of the current context. The review revealed that current commercialisation trends have contributed to a schism between welfarist and institutionalist thinking in the microfinance sector. The institutionalist ideology prioritises profitability and operational sustainability as a means of achieving broader outreach and depth.

The review of the literature also revealed that the commercialisation drive fronted by the institutionalists tends to undercut poverty reduction motives for profits. It is evident that issues of microfinance products and implementation designs have not been adequately explored in the literature – especially in the context of commercialisation. The various channels of implementation – group-lending schemes, individual lending and savings models – were also explored in the literature to ascertain their pros and cons. In summary, the literature review enabled the study to pin down a specific research gap worth examining in detail.

Chapter three delved into the country context. The country context covered essential background information on the economic and poverty status of Ghana;

the various poverty reduction initiatives implemented in Ghana and the challenges to the fight against poverty. Regarding Ghana's economic context, the chapter reflected on the country's previous sluggish growth rates, especially in the 1980s, and underscored the importance of the recent positive economic growth on the socioeconomic lives of the poor. The chapter also touched on some poverty reduction policies pursued in the past and examined their progress and challenges. The financial landscape in Ghana is made up of formal and informal institutions and regulated under different legal frameworks. It was apparent that the legal and regulatory framework governing Ghana's banking sector was conducive for financial deepening, although some gaps remain unfilled. The structure of Ghana's banking sector supports the establishment of various RCB and S&L companies, among others, yet linkages between these institutions and the informal financial markets remain weak.

A current review of the banking sector indicates that the sector faces some stressors – issues of NPLs and limited branch expansion. The chapter also touched on financial innovation and acknowledged the growing importance of mobile money technology in facilitating financial inclusion. Lastly, it was discovered that Jirapa municipality had limited formal financial institutions, with barely four currently operating in the entire municipality. However, two of these institutions have at least set up a branch outside the municipal capital.

Chapter four presented the methodology and analytical framework for the study. The study adopted the pragmatist approach as the research philosophy. The convergent parallel mixed-methods design was used, which combined quantitative and qualitative methods of data collection and analysis. The use of this research approach offered complementarities that were consistent with the research interest. The nature of the research objectives and questions necessitated the use of both quantitative and qualitative inquiries to examined perceptions and lived experiences of individuals. The study collected data from primary and secondary sources – administered 120 questionnaires, conducted 20 interviews and facilitated ten (10) FGDs.

The Sustainable Livelihoods Approach (SLA) and the Making Markets Work for the Poor approach (M4P) guided the formulation of research objectives, design of research instruments and the framework of analysis. The SLA offered a conceptual perspective to understanding clients' livelihoods, strategies and vulnerabilities in the context of design and implementation of microfinance products. Also, the use of the M4P approach gave clarity on the causes/constraints that obstruct clients' ability to access financial services. The approach aims to tackle the causes rather than the symptoms of market inefficiency, with the view to making microfinance markets work effectively for the poor in Jirapa municipality. A synopsis of the findings of the empirical chapters is presented next. The primary and sub-research questions are appropriately addressed.

8.3 Summaries of major findings

The central objective of the study was to examine the design of products and the implementation processes of microfinance from an institutional and client perspective, and the implications for poverty reduction. The following section summarises the vital empirical findings for the three research questions presented in chapters five, six and seven of the thesis. The empirical analysis helps present the contributions and policy implications of the study.

8.3.1 What are the various factors that influence how microfinance products are designed and implemented in Northern Ghana?

Chapter five was the first empirical examination of the study and was primarily poised to answer the above research question. The above research was concerned about designing customer-centric microfinance products. It delved into how microfinance products are designed and whether they reflect the poverty context of clients in rural Northern Ghana.

The study formulated the following sub-questions and themes in line with the above research question and problem:

The first sub-question was: How are contextual issues and the needs of clients considered in the design of microfinance interventions?

The study started with the initial position that understanding contextual issues – such as the causes and structures that perpetuate poverty – helps to design effective tools for poverty. Most importantly, the staff of all three institutions acknowledged the essence of designing products or tools to reflect the poverty context of clients.

The staff of CCU and SRB indicated that they always take contextual issues of clients in different communities into account when designing products. Both CCU and SRB are community-based institutions with their respective local board of directors and management who are knowledgeable of the local context of clients' livelihoods. On the other hand, the staff of SAT indicated that the design of products and interventions were centralised at the top management level and mostly at the head office and sent down to all branches for implementation. The ultimate responsibility of the staff at the branch level is to publicise and create demand for the products designed.

The clients of SAT, CCU and SRB all underline the importance of accessing products and services that meet their various poverty contexts. The study established different causes of poverty among clients of three institutions under review. Table 5.1 indicates that inadequate finance and unemployment were fundamental causes of poverty among clients of three institutions in Jirapa. Other causes included poor soil fertility, lack of market access for farm products and large household size. However, what do the differences in the poverty context of clients suggest? The study argued that designing products and services that are fit-for-purpose matter in tackling poverty in various contexts. They added that for microfinance, products need to be designed to address the causes rather than the symptoms of poverty.

Analysis from the study (table 5.2) points to the contrary. A majority of clients of SAT and SRB (67.9% and 60% respectively) revealed that products offered by institutions do not reflect their poverty context or needs. Out of the three institutions, only clients of CCU corroborated the earlier assertion made by the staff that they take into account the poverty context of clients when designing products. The study emphasised the essence of ensuring consistency in product designs and their actual implementation. Indeed, all institutions that aim to reduce poverty need to show commitment – providing the services needed by their target group. At the moment, that did not appear to be the case with SAT and SRB as evident in this thesis (see table 5.2 in chapter five).

The chapter also recognised the importance of livelihood analysis, especially in the context of microfinance products and implementation design. The chapter posited that it is not adequate for policymakers that aim to tackle poverty to focus on only an understanding of its causes, but a broader appreciation of livelihoods and strategies of people. The study found that livelihood analysis matters in financial product designs. We need to understand the livelihood realities of clients in order to design suitable tools to enhance their assets and manage their vulnerabilities. In this context, the study was poised to establish how clients of SAT, CCU and SRB make ends meet. Analysis in table 5.3 revealed that involvement in agricultural activities (mainly mixed farming and crop farming) remains the dominant source of livelihood income among clients of SAT, CCU and SRB in the Jirapa municipality.

Furthermore, the analysis of livelihoods also covered the vulnerabilities/shocks confronted by clients and their households, as well as the coping mechanisms adopted. The study established the leading livelihood shocks experienced by clients in the past 24 months to include loss of livestock and poor farm harvest (see table 5.5 in chapter five). The researcher believed that a clear understanding of these shocks would enable MFIs and other policymakers to design suitable products to manage livelihoods better. A majority of clients of SAT (67.9%) and SRB (58%) indicated that microfinance products and services failed to help them manage their livelihood shocks. Conversely, about 69% of clients of CCU confirmed that the products and services offered by CCU supported them to cope with livelihood shocks.

Consequently, other qualitative findings suggest that lack of appropriate financial tools to help clients manage livelihood shocks have compelled some clients to resort to using negative coping mechanisms. The established mechanisms for coping with livelihood shocks among clients in the Jirapa municipality included: the use of clients' savings, sale of household stock of food grains and the sale of household assets/livestock (see table 5.6). Following these findings, it was concluded that financial products should be designed not only to meet the needs of users but to help clients adequately anticipate and deal with their livelihood shocks in a manner that does not lead to negative household consequences in the long run. The role of financial institutions like

SAT, CCU and SRB in helping households manage shocks is crucial and should be reflected in product and implementation designs.

In all the above discussions, the study holds that clients' participation in microfinance product and implementation design processes is essential for their needs to be taken into context. Some of the findings (see table 5.7) show that a majority of clients of SAT and SRB, representing 53.8% and 40%, indicated they were not involved in the design processes of microfinance interventions. Additional findings from chi-square test analysis (chi-square = 15.649, df = 4, $p < 0.01$) also show evidence of a relationship between clients' level of participation and the financial institution they belong to. The findings add that about 57.1% of CCU's clients experienced a high level of participation in the design processes as compared to 25% and 26% for SAT and SRB respectively. More female clients with CCU had a high level of participation as compared to SAT and SRB that had reported the majority of male clients (see table 2 of appendix 5).

The implications of these findings on the lack of participation of clients in product design processes could be viewed from two perspectives. First, non-participation of the clients contributed to the failure of SAT and SRB to tailor products in consonance with the poverty context or needs of their clients (see table 5.2 in chapter five). Second, it limits MFIs' understanding of the financial lives of clients and the appropriate financial tools they need to address their livelihood shocks and vulnerabilities (table 5.5 in chapter five).

Group-based lending and savings were the conventional strategies of implementing microfinance in all three institutions surveyed. Based on this, the study was interested in establishing how group-based activities are structured, taking the needs of members into context. About 46.4% of clients, representing a majority of SAT's respondents, indicated their groups were formed through peer-selection by members. While 50% of CCU's clients formed their groups with help from an NGO that operates in the locality that combined group formation with training on better agricultural practices.

Similarly, about 40% of clients of SRB indicated that their group members were put together by the staff of SRB. Across the board, clients in all three institutions indicated they preferred peer-selection of group members to other strategies of group formation. However, clients also highlighted the importance of training of members before and after group formation. Peer-pressure and monitoring by members was the reason why group members preferred the peer-selection of members. Because of joint liability, peer-monitoring allowed group members to self-regulate and check how members use borrowed funds.

Nevertheless, besides CCU, a majority of SAT and SRB clients, representing 64.3% and 72% (table 5.9), indicated they had no knowledge of group members' use of borrowed funds. The study also established a client's membership to a group was a guarantee to access some form of support from group members in times of need. Apart from CCU, a majority of clients of SAT and SRB, representing 64.3% and 68%, indicated they accessed support from their group members. Chi-square analysis (chi-square =15.211, Sig at 0.000) revealed strong evidence of a relationship between the status of clients' locality (rural and urban) and their ability to access support from group members (see table 5 of the appendix for chapter five). Indeed, clients from rural-based groups were 76.7% more likely to access support from group members compared to 41.7% of their colleagues in the urban areas. This could be inferred to mean that social capital tends to be more viable in rural localities relative to urbanised localities.

All three institutions involved in this study also implemented individual credit programmes. In line with the primary objective of the chapter, the study also answered the question: how are individual credit programmes perceived and to what extent do their features reflect the livelihoods of clients? The idea of ensuring customer-centricity does matter in the design of financial tools for poverty reduction. Clients' perceptions of their nature of access vis-a-vis the flexibility of individual loan products were analysed. The findings suggest that a majority of SAT and SRB clients, reflecting 50% and 54% respectively, considered individual loan products not flexible. On the contrary, a majority of clients of CCU (57.1%) found individual loans to be flexible (see table 5.11).

Similarly, the schedule of loan disbursement was found to be inconsistent with the nature of SAT and SRB clients' livelihood cycles. Clients of CCU, however, considered the schedule of individual loan disbursement as consistent with their livelihood cycle (see table 5.12). Additionally, a majority of clients of SAT and SRB (64.3% and 56% respectively) suggested that the nature of loan disbursement was not convenient; whereas 66.7% of CCU's clients indicated it was convenient (see table 5.13).

In terms of the loan amount, the study established that a majority of clients of SAT (39.3%) and SRB (38%) indicated they managed to access credits above GHs700 ($133[185]), while 42.9% of CCU's clients accessed loans of GHs500 ($95) or less. However, interest charged on loans was viewed to be favourable to a significant number of clients of CCU; while a majority of clients of SAT and SRB considered it unfavourable (see table 5.15).

Consequently, the study argued that the characteristics embedded in loan products have implications for a client's ability to repay loans. The findings on this revealed that, except for CCU, a majority of clients of SAT (64.3%) and SRB (56%) considered the structure of loan repayment to not be matched with their business or livelihood cycle (see table 5.16).

The study was also interested in understanding the perception of clients regarding the nature of savings products. How are institutional savings programmes designed, and how do clients perceive them as a means of managing their vulnerabilities? It was obvious that although clients saved for a variety of reasons, a majority of the respondents in all three institutions indicated their saving was to support households to manage emergencies (see table 5.17). It was also apparent that the relatively limited nature of savings tools made it somewhat difficult for clients to save for specific purposes.

Also, savings products are viewed to be convenient when the processes involved in deposit collection and withdrawal are expedient to clients. Most clients consider the proximity to their savings institutions as a defining attribute of convenience. The findings suggest that 46.4%, 42.9% and 50%, representing clients of SAT, CCU and SRB respectively, considered their savings products as convenient (see table 5.18). The interest on savings was also found to be unsatisfactory to a majority of clients of SAT, CCU and SRB, and was a source of disincentive for long-term savings.

[185] Exchange between the Ghana cedis and United States dollar is 5.2726 (ask price). Price quotations are from the Bank of Ghana (19/08/2019).

8.3.2 How and to what extent do the various designed microfinance products and channels of implementation affect clients' poverty?

This research question was answered in chapter six. It delved into the poverty reduction implication of microfinance product design and implementation. The chapter examined various channels of implementing microfinance, taking into consideration how the products were designed. Several sub-questions were formulated to help answer the main question for this chapter. One of the initial sub-questions centred was: Does the consideration of contextual issues in the design of financial products of clients have any implications for poverty reduction?

Some of the contextual issues considered included an examination of the implication of clients' locality (rural and urban) on their poverty status. The study established that microfinance has contributed 'very much' to the household outcomes of more rural clients than urban. Indeed, 17.9% (SAT), 28.6% (CCU) and 30% (SRB) of rural clients indicated their respective institutions contributed significantly towards their households. In contrast, 10.7% (SAT), 21.4% (CCU) and 4% (SRB) of urban-based clients indicated that the respective institutions contributed 'very much' towards their households (see table 6.1).

Similarly, the majority of rural-based clients indicated that they had made a significant contribution to the intervention of microfinance towards the development of their businesses. The findings revealed that rural clients representing 17.9% (SAT), 26.2% (CCU) and 34% (SRB) responded that microfinance made significant contributions to their businesses. In comparison, only 7.1% (SAT), 19% (CCU) and 10% (SRB) of urban clients said their respective institutions contributed 'very much' to clients' household businesses (see table 6.2).

Additionally, an analysis of the Multidimensional Poverty Index (MPI) also revealed that rural household clients were more likely not to be deprived as compared to their urban counterparts (see table 6.3). The results emphasised the importance of the role played by MFIs to support rural clients to manage their household and livelihood activities. However, the findings also call for a reconsideration of policy actions in microfinance to address issues of urban poverty.

The study also found that the occupational group a client belonged to has implications for their MPI status. The study revealed that clients of SAT and SRB that undertook non-farming livelihood activities were more likely to be non-deprived as compared to those engaged in farming. However, the reverse is true with CCU, where the majority of clients in farming were found not to be deprived as per their MPI (see table 6.5). To this end, MFIs need to take into context the significance of the occupations of clients when designing financial tools for poverty reduction.

Also, clients' household size is of relevance to MFIs' product design processes and has implications for poverty reduction. The analysis suggests that the structure of clients' households (size and gender) needs to be incorporated into the design of microfinance products. Some households, depending on the size, gender and age structure, might need products to support the educational outcomes of household children, while an ageing household would instead prefer health care. The findings on this show that clients with large households are more likely to be multi-dimensionally deprived relative to those in small households. The chi-square analysis also revealed a relationship between clients' household size and their MPI status: SAT, CCU and SRB with $x^2 = 7.257\, p < 0.05$; $x^2 = 4.735\, p < 0.10$; and $x^2 = 10.437\, p < 0.01$, respectively (see table 6.6).

The chapter also revealed that critical poverty analysis is crucial to understanding clients' household needs and vulnerabilities and how to address such needs with appropriate financial and non-financial tools. The findings suggest clients that indicated their institutions designed products to reflect their poverty context were more likely to experience 'very much' contributions of microfinance to their household poverty outcomes (see table 6.7). The causes of household poverty affect clients differently.

The findings show that the majority of the clients of SAT that identified 'inadequate finance' and 'poor soil fertility' as the cause of their poverty were found to be multi-dimensionally deprived. In the case of CCU and SRB, the majority of clients who were found to be deprived (in the context of MPI) identified a lack of employment opportunities and inadequate finance as their cause of poverty.

The chapter also examined the effectiveness of microfinance products in meeting clients' livelihood strategies and managing livelihood shocks with the view to reducing poverty. It observed that clients of the three institutions were predominantly into growing crops and keeping of livestock for a livelihood. Similarly, clients engaged in crop farming were more likely to be MPI-poor as compared to clients involved in other livelihood groups. The analysis revealed that most clients were susceptible to: poor crop harvest, illness/injury and loss of livestock as shocks in their livelihood struggles. Consequently, clients that experienced poor crop harvest and illness/injury of the household member were more likely to be MPI-poor, relative to clients that experienced other forms of livelihood shocks.

Nevertheless, a majority of clients, notably among SAT and SRB, indicated that microfinance products failed to support them to cope with livelihood shocks. Conversely, clients' use of both positive and negative coping mechanisms to shocks depended on the convenience and availability of the options to mitigate clients' livelihood shocks. A majority of all the respondents (58%) observed that the coping mechanisms for their shocks were perceived to have negative ramifications (see figure 6.2). The sale of assets/livestock, savings and self-help groups were common strategies used in coping with livelihood shocks.

However, the study found that a majority of clients that used the sale of assets/livestock and the sale of household food grains were more disposed to be MPI-poor than those that used other forms of coping mechanisms. The chapter emphasised that alleviating poverty should not be construed as an escape from the poverty trap, but also a practical guard against the risk of people sliding back into poverty. As such, there is a need for the design of microfinance products and services that is congruent with clients' livelihood strategies and coping mechanisms to shocks.

The study revealed that participation does matter in poverty reduction. However, what implications does clients' participation in the design processes of intervention have for poverty reduction?

Surprisingly, it was established that low participation of clients in the design processes of microfinance products had a positive effect on their household outcomes ($B = 0.364\ (t = 1.849)$). Also, ‘no participation’ and ‘low participation’ had positive relationships with clients’ business outcomes as evident in the following respective statistics: ($B = 1.307(t = 2.833),\ p < 0.01$). A majority of women with SAT and SRB, representing 25% and 14% respectively, were not involved in the product design processes, and hence, were found to be ‘deprived’ in the MPI (see table 6.14). However, our conclusions suggest that women’s participation in the design of microfinance interventions and products does matter for their economic empowerment. Group lending is a significant channel of implementing microfinance in the Jirapa municipality. Nevertheless, how does the group-lending method meet the poverty reduction objectives of clients and ensure the sustainability of clients?

Chi-square analysis of the data established evidence of a strong relationship between the group formation strategies deployed among clients of SRB and the effect on their business outcomes ($\boldsymbol{x}^{\mathbf{2}} = 13.262\ p < 0.05$). The study found that group formation strategies have implications for poverty reduction. Groups formed through ‘peer-selection with no training’ had a negative relationship between and clients’ business ($B = -0.112,\ p < 0.01$) and household ($B = -0.029,\ p < 0.05$) outcomes.

Conversely, the finding also suggests that groups formed through ‘training before peer-selection’ showed a positive relationship with clients’ business ($B = 1.251,\ p < 0.05$) outcomes. Additional findings also suggest that microfinance groups formed with ‘only females’ showed a positive relationship with clients’ business ($B = 1.095,\ p < 0.05$) and household ($B = 0.569,\ p < 0.01$) outcomes. While ‘male-only’ groups observed a negative relationship with clients’ household ($B = -0.579,\ p < 0.01$) outcomes. The study concluded that MFIs need to take into context the dynamics in groups when designing group-based loans (with or without joint liability), to avoid cases of elite capture in groups.

The study established that individual credit products are needed to address the specific needs of clients that may otherwise not be captured in group-lending programmes. To this end, the study asked: Does the design of individual credit products have any poverty reduction ramifications for clients?

Our findings suggest a lack of flexibility in accessing individual loans on the part of clients of SAT and SRB. Even when personal loans are accessed, the size of credit does have implications for poverty reduction. The findings from regression analysis revealed a negative relationship between loans accessed below GHs500 and the clients' business $(B = -1.418,\ p < 0.01)$ and household $(B = -1.161,\ p < 0.05)$ outcomes.

Other loan characteristics do have implications for both clients' household and business outcomes. Findings from ordinal regression show a negative relationship between late disbursement of loans and clients' business $(B = -1.458,\ p < 0.01)$ and household $(B = -1.854,\ p < 0.01)$ outcomes. These findings suggest that MFIs need to commit to early disbursement of loans in line with clients' livelihoods. The late disbursement of loans is particularly inimical for agricultural activities since the financial needs of clients for such activities are seasonal and time-bound.

Surprisingly, our findings also established that strict loan repayment schedules have positive implications on clients' poverty – that is both clients' business $(B = 0.892,\ p < 0.10)$ and household $(B = 1.199,\ p < 0.05)$ outcomes. The enforcement of strict repayment of loans meant that clients who serviced their loan commitments according to the schedule could access more loans in the future to support their livelihoods.

Savings play an essential role in the economic lives of clients in the Jirapa municipality. However, do savings products designed by MFIs enable clients to reduce poverty and how? Clients of SAT, CCU and SRB save for a variety of reasons that have effects on their poverty. Our findings suggest clients that save to pay back loans has a positive $(B = 1.395,\ p < 0.05)$ effect on their household poverty outcomes; while saving for the purpose of addressing household emergencies had a negative $(B = -1.232,\ p < 0.10)$ relationship with the business outcomes of clients.

It was evident that the nature of savings products in the study area does not adequately support capital formation, due to the lack of specific financial tools to encourage a long-term savings drive. The findings suggest that savings products that do not support capital formation have a negative effect on both the business $(B = -1.355,\ p < 0.01)$ and household $(B = -1.394,\ p < 0.05)$ outcomes of clients.

The flexibility of savings tools does have ramifications for clients. In this study, weekly and daily deposit collection from clients was viewed to be flexible. Findings from a regression analysis revealed that weekly deposit collection has a positive effect on the business $(B = 1.105,\ p < 0.10)$ and household $(B = 2.828,\ p < 0.10)$ outcomes of clients. Nonetheless, a majority of clients considered the interest paid on their deposits to be unattractive. It appeared that clients who indicated dissatisfaction with the level of interest paid on their deposits also indicated that their respective MFIs did not contribute to their business outcomes (see table 22 of the appendix for chapter 6).

8.3.3 What are the implications for designing and implementing microfinance products and services for these to work effectively for the poor in Northern Ghana?

The above research question was addressed in chapter seven of the thesis. It explored how the microfinance ecosystem could be made to work effectively and sustainably for the poor. It captured the fundamentals of the microfinance market system, mainly exploring the obstacles confronting clients and MFIs with the view to shaping the way forward. Additionally, the chapter examined the necessary supporting functions to complement the interactions in the core market.

8.3.3.1 Demand and supply obstacles in microfinance and the way forward

The study first examined the obstacles that undermine clients' ability to access credit from SAT, CCU and SRB. From the perspective of clients, high interest on loans, small loan sizes and the mismatching of loans with clients' livelihoods, were established as the major obstacles. The findings on the way forward to tackle these obstacles from the perspective of clients included the following:

MFIs should pursue an accessible interest regime, tailor loan products to the livelihood needs of clients and also increase the loan sizes to clients.

The obstacles clients confronted vis-à-vis the savings products offered by SAT, CCU and SRB were also considered. Accordingly, lack of tailored/innovative savings alternatives, lack of insurance policies for the poor and limited networked access to a savings account, were considered as major constraints that had profound implications on clients' ability to save. The findings on this propose that designing savings products to reflect the needs of clients, providing access to affordable insurance policies for the poor and the provision of more incentives for savings, would encourage more clients to take up a long-term interest in the microfinance savings market.

The challenges on the supply side of microfinance were considered next. It was established that several challenges, including cost of outreach, information asymmetry, high cost of transactions, limited financial budget to support ICT business solutions, weak supervision and regulatory framework, among others, were identified by the staff of SAT, CCU and SRB as obstacles they confronted. It was established that supporting MFIs to access long-term finance, strengthened regulatory environment, and adequate investment in infrastructure – including ICT, and other initiatives – are essential to address the challenges faced by SAT, CCU and SRB. The study concluded that providing financial services with the support of MoMo technology could help reduce the cost of operations and ensure broader outreach. Our findings suggest a relatively high percentage of mobile phone ownership (82% of clients), with only 18% of clients with access to MoMo.

8.3.3.2 Supporting functions and rules: improving performance in the microfinance market system

The second aspect of the chapter also analysed the supporting functions needed to augment the activities in the core market. It is believed that market systems are complex – comprising of multi-faceted actors, networks and regulations. As such, it is appropriate to take into consideration the supporting functions and rules that are necessary to improve the performance of the various stakeholders in the market system. The available supporting functions that aid the activities of SAT, CCU and SRB in the Jirapa municipality include government and allied agencies (such as the agriculture ministry, veterinary services department), as well as local and international NGOs operating in municipality.

8.3.3.3 Government support for microfinance in Ghana: what is needed in the context of clients of MFIs in Jirapa municipality?

It was observed that the financial sector in Ghana, particularly in the Jirapa municipality, has always attracted inconsistent support from the Government of Ghana towards improving the access and delivery of financial activities. The findings from the analysis suggest that microfinance alone is not sufficient to sustainably reduce poverty in the Jirapa municipality. Consequently, the clients of SAT, CCU and SRB suggested that government support is needed to supplement microfinance services. Adequate legal and regulatory framework support for Fintech and the coordination of poverty reduction efforts of other agencies and partnerships are essential ingredients needed to make microfinance work sustainably for the poor.

Some of the major government support mechanisms needed by clients were highlighted to include the following: development of agricultural insurances policies, provide agricultural support, support for critical infrastructure in rural communities and the networking rural financial institutions (see figure 7.7).

The study also established that SAT, CCU and SRB should consider leveraging on technology to help reduce their increasing cost of outreach, especially to rural communities. The findings suggest that mobile money technology holds a considerable promise for the future of microfinance product designs. More than half of the respondents indicated they had access to a mobile phone but were yet to have access to mobile money technology (see figure 7.8).

8.3.3.4 Coordination of the activities of MFIs with relevant institutions

The coordination of the various activities offered by supporting institutions in the microfinance ecosystem is essential to ensure effectiveness and avoid duplication of efforts. The study held that coordination of development efforts is essential to guarantee sustainable poverty reduction from below. In the context of Ghana, national development processes for poverty reduction are often characterised with different formal and informal institutions with different policy goals.

The findings of the study revealed that the iDE had played a major role in providing the necessary training to farmers' groups in various communities. It was established that the training, together with the provision of access to finance through the Deki loan scheme, had contributed enormously to the development of microfinance and poverty reduction in Jirapa municipality. However, it was suggested that more coordination efforts were needed to ensure the availability of advisory services from the Ministry of Food and Agriculture (MOFA).

The findings from interviews suggest there are significant difficulties in accessing services from the Veterinary Services Department (VSD). Similarly, crop farmers also rarely had access to technical advisory services on what to sow, when to sow and how to sow crops according to soil types and precipitation levels. To this end, it is essential to ensure the services of VSD and the Directorate of Crop Services (DCS) are available to clients to augment the financial services currently provided by SAT, CCU and SRB in the Jirapa municipality.

8.4 Findings: from specific to general research questions

After summarising the three specific questions and sub-questions, the study also attempted to summarise the answer to the overall research question: What are the key factors that influence how micro-finance products have been designed and implemented in Northern Ghana and to what extent these have impacted on the levels and the nature of poverty of the clients?

Following this main research question, the predominant finding was that microfinance products were designed without substantial inputs from clients (this was profound with SAT and SRB). The contextual issues of clients – particularly on their poverty issues – were seldom considered due to the limited level of client involvement in the product design processes.

Consequently, the inadequate level of client involvement in the design processes resulted in the mismatch between the needs of clients and the design of microfinance products and implementation. As a case in point, MFIs' products were not matched with the livelihoods and, therefore, did not take into consideration the livelihood shocks that undermine the ability of clients to reduce poverty. Another related example was that the schedules of loan disbursement and repayments were not consistent with the livelihood cycle of clients. It was concluded that the effects of non-participation of clients in the product design processes of MFIs (particularly with SAT and SRB) accounted for the inconsistent nature of microfinance products with clients' contexts (see sections 5.1, 5.2, 5.3 and 5.5).

The implications of microfinance product designs on their clients' poverty outcomes were examined as part of addressing the main research question. The study measured clients' poverty in terms of household and business outcomes, and also the clients' household MPI (see sections 6.15, 6.16 and appendix 4.1, 4.2 and 4.3 of chapter four). The study found that clients are most likely to be deprived in terms of MPI when products designed by MFIs fail to support clients to cope with livelihood shocks. In effect, designing products that reflect clients' livelihoods helps to reduce poverty (see section 6.2.2). Also, the group formation strategies and the structure of joint-liability groups had significant effects on the business and household outcomes. Microfinance groups that were constituted by only women had more effect on their poverty status than male constituted ones (see sections 6.5.1 and 6.5.2).

It was argued that the structure of loan contracts or terms does matter in poverty reduction. Credit schemes had tremendous effects when loans are disbursed appropriately and in line with the clients' business cycles. However, it was surprising to note that loan products designed with stringent repayment schedules had a positive poverty reduction implication on clients. The results on the effect of loan size on households and businesses showed that small loan amounts (below GH¢500) had negative outcomes (see sections 6.6.2, 6.6.3 and 6.6.4).

Savings products were found to be useful and supportive to clients' livelihoods, especially when designs of savings collection schemes were embedded with adequate flexibility. Weekly collections of savings by mobile bankers were viewed to be flexible to clients. However, depositors were unsatisfied with the relatively low interest paid on their savings (see sections 6.7.2 and 6.7.3).

Given the nature of poverty and the different contextual issues evident in the study area, it was argued that a better understanding of the constraints that face both clients and MFIs is essential. The study concluded that addressing the hurdles in the microfinance market system will enable adequate access to financial services and ultimately support to reduce poverty.

Also, a final observation of the study shows that critical non-financial services needed to be knitted into the product designs, to augment the various financial services of MFIs in the study area. As such, the supporting functions (government agencies and NGOs) and rules (banking regulations from BOG) needed to be adequately coordinated to ensure effective performance of the microfinance market system (see section 7.2).

8.5 Methodological implication and contributions of the study

This study made some significant methodological contributions to understanding the microfinance product and implementation design processes and their implication on clients' poverty in the Jirapa municipality. The results of this study revealed that building an understanding of microfinance products and implementation and their effectiveness is inseparable from the contextual and livelihood issues that underpin the lives of clients.

The methodological strategy used in this study suggests a reconceptualisation of how MFIs design their products for implementation – considering the differences in socioeconomic lives of clients and their rural communities. The study has made the following methodological contributions:

- First, in studying microfinance product and implementation designs from the perspective of clients and MFIs, the study emphasised understanding what they both perceive and appreciate. Both clients and MFIs have valid concerns regarding how interventions should be designed and implemented. Nevertheless, such concerns have always been addressed distinctively in studies. This study presented a paradigm shift – combining both demand and supply-side concerns in the analysis of microfinance market systems. It is believed that this approach would be a harbinger for more future studies that explore both demand and supply perspectives in microfinance.

- Second, studies in microfinance have mostly used a single conceptual underpinning to develop a framework for analysing the data. As such, the study combined the SLA and the M4P approach (as the analytical framework) to analysing the perceptions and lived experiences of clients and their households (as the unit of analysis) on microfinance interventions in the study area. The combination of different components of the SLA and M4P presents an innovative analytical approach to studying poverty in its multi-dimensional facets.

- Thirdly, the study used the convergent parallel mixed-methods approach. This approach ensured that both quantitative and qualitative collection and analysis were undertaken simultaneously, and their results merged to reveal knowledge. This methodological approach allowed for the questionnaire and interview guide to be designed with overlapping characteristics. This helped with the limited time available for data collection in the field. A significant number of studies on microfinance have always used either a quantitative or qualitative method in the analysis. As such, this study adds to the few studies that have used the convergent parallel mixed-methods approach for microfinance analysis.

- Fourth, the study also contributes to the literature on how to transform and make microfinance markets work for the poor. Contrary to other studies, this research explored various alternatives to transform the microfinance ecosystem to be effective in poverty reduction. For example, using the M4P approach, the study argued that addressing the constraints in the core market, and strengthening the rules and supporting functions would help make microfinance work sustainably for the poor.

- Fifth, most studies on microfinance seldom explore how both clients and MFIs perceive the design of implementation strategies. The study also contributes ongoing discussions on how to improve the implementation strategies of microfinance products, taking individual and household contexts into account. Indeed, since the introduction of the Grameen Bank in the 1970s, most MFIs, globally, have sought to replicate its implementation model in their operations. It is essential to know which product and implementation strategy work for whom and how they could be improved. For example, this study revealed that joint-liability groups constituted with females only tend to be more effective at contributing to members' household and business outcomes.

- Sixth, the study contributes to the knowledge of microfinance product designs. It established how microfinance products and implementation should be designed to reflect the diversity of clients' livelihood portfolios and poverty context. The study contributes to the literature on customer-centricity, emphasising designs based on the contextual needs of clients. For example, this study showed that small loans tend to be less effective as compared to large loan sizes for specific business purposes. Also, the study showed that repayments needed to be stringent but linked to the business cycle of clients.

8.6 Limitation of the study

The study confronted the following limitations in the process of data collection and analysis:

- It must be emphasised that the main objective of the study was to ensure its findings become lessons for other MFIs in rural communities with microfinance market systems. Nevertheless, due to limited resources, the study only involved three institutions in one municipality in the Upper

West Region. Consequently, the findings and lessons from the study may not apply to MFIs outside the Jirapa municipality.

- Another limitation of the study was that it had to be conducted within a short period allotted for data collection. The study administered 120 questionnaires and administered about 20 interviews across six communities (urban and rural). The researcher, therefore, used the convergent parallel mixed-methods approach to help optimise the limitation and reduce the potential effect of the limitation. Ideally, the study had initially planned to conduct a mixed-methods exploration. This type of mixed-methods approach allows for sequential data collection and analysis, beginning with the qualitative phase. The quantitative method then seeks to test and further quantify initial qualitative findings.

- Furthermore, the study was also faced with the challenge of access to data on clients' financial records with the respective institutions. The study had wanted to get data on the rate of client drop-outs and expulsion from groups and the MFIs. Such data could inform a different strand in the analysis to reveal knowledge on how to sustain clients based on the reported reasons for clients leaving an intervention. The study also constructed the MPI for clients and had wanted to use all the similar indicators for all three dimensions. However, the researcher had to replace 'nutrition' as an indicator in the health dimension with access to 'health insurance'. Children's nutritional data from clients' households was challenging to access.

8.7 Area for future research

The findings of this study on how microfinance products and implementation are designed and the implications for the poverty of clients raises relevant issues that necessitate further, more detailed, research in the future. It is necessary for this same study to be conducted using a broader geographical scope, to explore the potential for generalising its findings. To this end, it is recommended that future research on the subject matter should cover all districts and municipalities in the Upper West Region of Ghana.

Findings from this research suggest that strict loan repayment terms had a significant contribution towards clients' household and business outcomes. The findings meant that MFIs that implemented a stringent loan repayment regime tend to benefit clients, contrary to this study's assumption. Further future empirical investigations are required to examine and confirm this finding, given the fact that the repayment schedule is an essential component of the structure of microfinance loan terms. It would also be crucial for similar future research to explore the practicability of enabling loan monitoring, credit scoring and supporting loan repayments through mobile money technology. Future studies in this area would also help explore the viability of financial technology in reducing the cost of microfinance operations. It is believed this could also help reduce the associated risk involved in the daily/periodic cash handling by MFIs and their clients.

Group-based lending with joint liability remains a critical microfinance implementation strategy employed to reach most rural clients. Nevertheless, our findings revealed that groups formed by males were more likely to experience adverse effects on the household and business outcome, relative to their female counterparts. Given the established importance of joint-liability lending to rural financial institutions, it is essential for a further re-examination of this finding with the view to determine how male-only groups can be effective for poverty reduction.

The study also wanted to research both clients and non-clients of MFIs, to draw parallels in their poverty situation, and to particularly explore how product designs could capture the needs of non-clients of financial institutions. This initial research idea was inspired by the fact that access to finance is viewed as an enabler to the realisation of the SDGs. Therefore, future detailed research is needed on how to develop better financial tools that target the financially excluded in rural communities.

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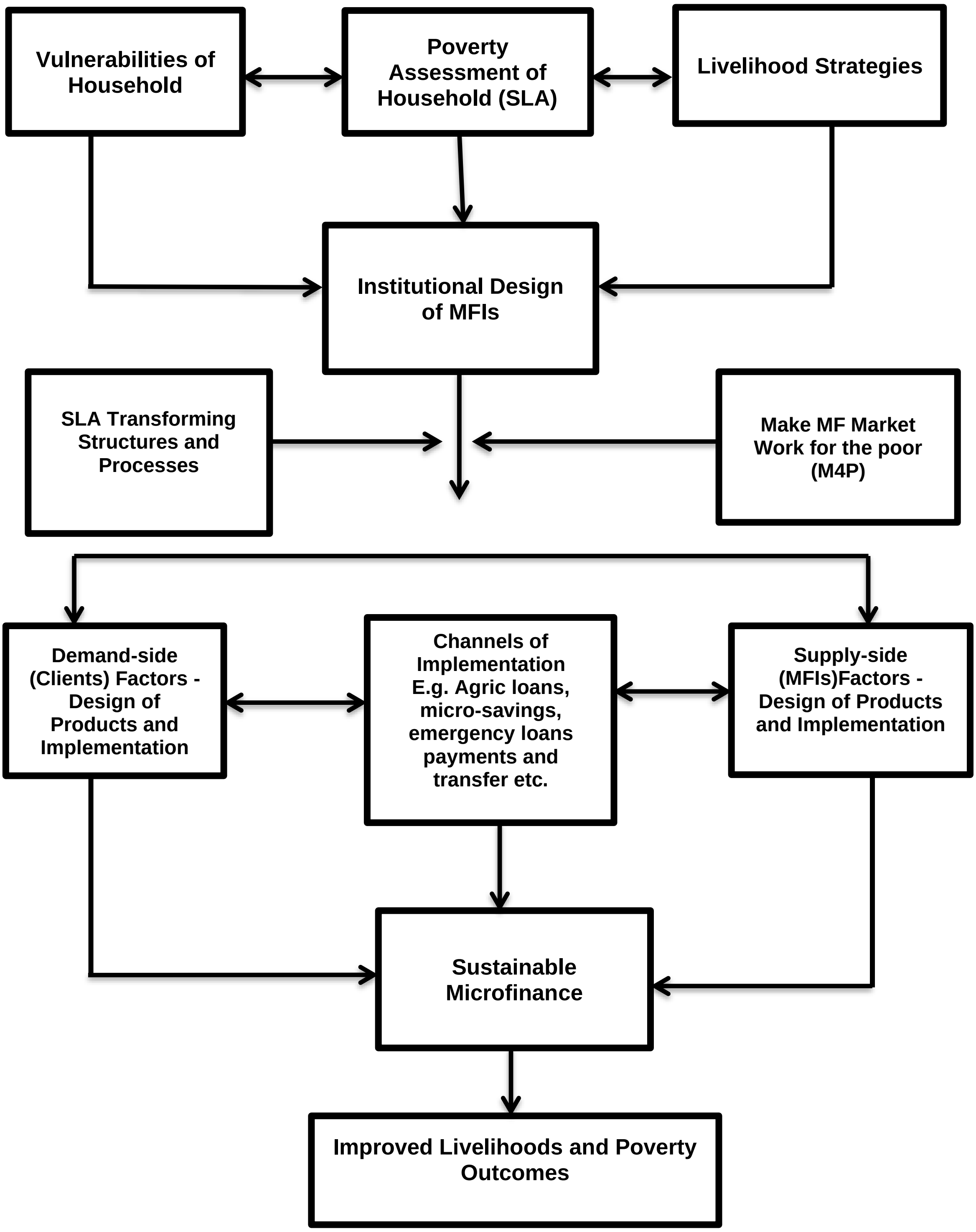
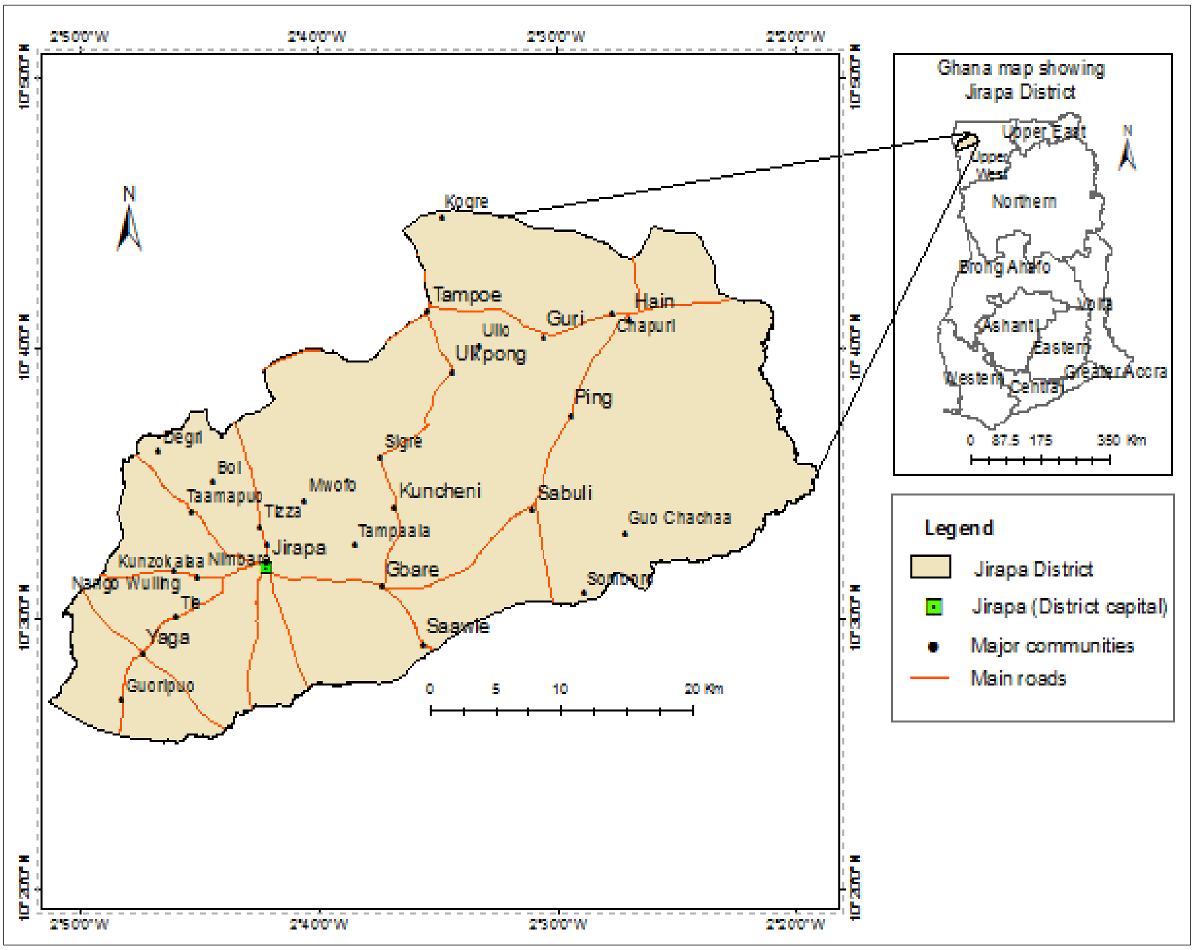
APPENDICES

Appendix 4
Figure 1: Analytical Framework



Source: Researcher's construct (2019)

Figure 2: Map of Jirapa Municipality



Source:

Appendix 4.1: Computation of Multidimensional Poverty Index (MPI)

The MPI is composed of three dimensions made up of ten indicators. Associated with each indicator is a minimum level of satisfaction, which is based on international consensus (such as the Millennium Development Goals or MDGs). For this thesis, the ten indicators, across three dimensions, were all equally weighted.

Following Alkire and Foster (2007, 2011a), each indicator in all the dimensions[186] was equally weighted as follows: (1) education $1/6$; (2) health$1/6$, and living standard$1/18$. Note that the indicator *i* weight as w_i, with $\sum_{i=1}^{d} w_i = 1$

Where a score of 1 when the person is deprived in all component indicators. A person, who is not deprived in any indicator, receives a score equal to 0. Formally:

$$c_i = w_1 I_1 + w_2 I_2 + \cdots w_d I_d$$

Where $I_i = 1$ if the person is deprived in indicator *i* and $I_i = 0$ otherwise, and w_i is the weight attached to indicator *i* with $\sum_{i=1}^{d} w_i = 1$
A second cut-off or threshold is used to identify the multidimensionally poor, which in the Alkire-Foster methodology is called the poverty cut-off. In this chapter, we define

[186] The following indicators were captured in each dimension: Education – years of schooling and school attendance; Health – child mortality and NHIS enrolment; and Standard of living – access to electricity, access to drinking water, sanitation, flooring, cooking fuel and assets ownership.

the poverty cut-off as the share of (weighted) deprivations a person must have in order to be considered poor, and we will note it with *k*[187].

The following steps prescribed by Alkire and Foster: In the first step of the computation, each person is assessed based on household achievements to determine if he/she is below the deprivation cut-off in each indicator. People below the cut-off are considered deprived in that indicator. After the first step, the deprivation of each person is weighted by the indicator's weight. If the sum of the weighted deprivations is 33% (1/3) or more of possible deprivations, the person is considered to be multi-dimensionally poor.

As such, someone is poor if $c_i \geq k$. In the MPI, a person is identified as poor if he or she has a deprivation score higher than or equal to 1/3. In other words, a person's deprivation must be no less than a third of the (weighted) considered indicators to be considered MPI poor.

Appendix 4.2: Aggregation of Dependent variables using Principal Component Analysis (PCA)

The two dependent variables (household outcome and business outcome) used in the OLS regression were aggregated using PCA.

The application of PCA[188] is a multivariate statistical technique that can be used to reduce the number of variables in a dataset by transforming them into a much smaller number of components; each component is a linear weighted combination of the initial variables (Vyas and Kumaranayake, 2006). The first component, which explains the most significant part of the variation in the data, is chosen as the wealth index (Filmer and Pritchett, 2001; Sahn and Stifel, 2003).

The PCA was applied to the indicator matrix, which provided a set of category-weights from the first dimension or factorial axis of the analysis results. A household's PCA composite indicator score was calculated by adding up the weighted responses. The calculation of the contribution of microfinance to clients' household and business was done by combining seven (7) set of variables for each category. The equation below shows the statistical technique in undertaking PCA.

$$PCA_i = G_{i1} K_{i1} + G_{i2} K_2 + G_{ij} K_j + \cdots + G_{ij} K_j$$

Where PCA_i, is the i^{th} client's household or business composite indicator score, $\mathrm{G_{ij}}$ is the response of household *i* to category *j*, and K_{j} is the PCA weight for the first dimension applied to category *j*.

For example, in the case of the aggregate effect of microfinance to clients' household outcome, the researcher used PCA to transform the following variables below:

The same exercise was done when computing the aggregate effect of microfinance to clients' business outcome, using the following set of variables:

[187] Again, this notation differs from Alkire and Foster (2007, 2011a)'s paper, where k is defined as the number of deprivations someone must experience in order to be considered poor. But notation is consistent throughout this chapter and equivalent to the original paper

[188] Each household asset is assigned a weight generated through PCA (Filmer and Pritchett, 2001, Vyas and Kumaranayake, 2006). Since the landmark papers of Filmer and Pritchett (1999) almost all asset-based wealth indices have used PCA for computing the asset weights. In line with the tradition in the field, the study used PCA for estimating the weights.

Appendix 4.3: Aggregation of Ordinal Dependent variables

The dependent variables (household outcome and business outcome) used for the ordinal logistic regression were computed by aggregating 14 different variables. These variables were used to measure the effect of microfinance on clients' businesses' and household. For example, the dependent variable (business outcome) had seven (7) different variables and the same for the other dependent variable (household outcome). All the variables were selected based on observations and interviews from the pilot study and also inspired by the literature and the SEEP manual[189]. The researcher's objective was to construct a dependent variable that was a composite of all the other variables in each category. In terms of description, all the dependent variables had the same characteristics and number of categories of responses that made it easier to build a composite variable out the seven variables.

Each composite dependent variable was computed by multiplying the possible number of responses in each variable by the number of variables for each category. Each variable had three possible responses that include – very much (coded 1), somewhat (coded 2), and not at all (coded 3). These responses were used to measure the effect of microfinance intervention across the various household and business-related variables.

At the end of this exercise, all seven variables (for each of the dependent variables) were aggregated[190] to form a single composite dependent variable – with three ordered responses. For example, responses from variables such as expanded business, new crops, new technology, new market, reduced the cost of doing business, financial literacy and acquired new assets/livestock were aggregated inline the above strategy to form a composite dependent variable for 'business outcome[191]'. Also, responses from variables such as support for HH emergencies increased in HH income, support child education, increase HH assets, service HH debts, improved HH savings, and participate in HH decision-making were aggregated to constitute another dependent variable – household outcome[192].

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[189] See Nelson et al. (2004) Learning from Clients: Assessment Tools for Microfinance Practitioners. Washington D.C.: SEEP Network.

[190] The researcher ranked the total possible responses (21 responses) into three categories, as follows: for the sum of responses for a variable falling between 7-11 was recoded as 'very much'; 12 – 14 was recoded as 'somewhat', and 15 – 21 was recoded as 'not at all'.

[191] This variable measured the effect of microfinance on their clients' at the business level (using business related characteristics and indicators)

[192] This dependent variable was used to measure the effect of microfinance product design or intervention on their clients at the household level (using household level features and indicators).

Appendix 4.4: Definition of variables in regression models

Table 1: All the Variables used in the Ordinal Logistic Regression Models

Name of Variable	Symbol for variable	Type of variable	Description
Household Outcome	$ln\ y$	Ordinal	DV[193]
Business Outcome	$\ln y_i$	Ordinal	DV
Age	λ_1	Continuous	IV[194]
Household Size	λ_2	Categorical	IV
Gender	λ_3	Dummy	IV
Marital Status	λ_4	Categorical	IV
Locality	λ_5	Dummy	IV
Occupation	λ_6	Categorical	IV
Reason Saving	λ_7	Categorical	IV
Assess Saving Product	λ_8	Categorical	IV
Savings Collection	λ_9	Categorical	IV
Interest on Savings	λ_{10}	Categorical	IV
Capital Formation	λ_{11}	Categorical	IV
Loan Eligibility	λ_{12}	Categorical	IV
Loan Amount	λ_{13}	Categorical	IV
Loan Interest	λ_{14}	Categorical	IV
Loan Disbursement	λ_{15}	Binary	IV
Loan Repayment	λ_{16}	Binary	IV
Access Loan Elsewhere	λ_{17}	Binary	IV
Human Capital	λ_{18}	Categorical	IV
Natural Capital	λ_{19}	Categorical	IV
Financial Capital	λ_{20}	Categorical	IV
Social Capital	λ_{21}	Categorical	IV
Physical Capital	λ_{22}	Categorical	IV
Cell Phone	λ_{22}	Binary	IV
Refrigerator	λ_{22}	Binary	IV
Bicycle	λ_{22}	Binary	IV
Truck	λ_{22}	Binary	IV
Generator	λ_{22}	Binary	IV
Motorcycle	λ_{22}	Binary	IV
Television	λ_{22}	Binary	IV

[193] Dependent variable
[194] Independent variable

Table 2: All Variables used in the OLS Regression Models

Name of Variable	Symbol for variable	Type of variable	Description
Household Outcome	γ	Continuous	DV
Business Outcome	γ_i	Continuous	DV
Log Age	X_1	Continuous	IV
Household Size	X_2	Continuous	IV
Gender	X_3	Dummy	IV
Marital Status[195]	X_4	Categorical	IV
Marital Status-single	X_5	Dummy	IV
Marital Status-married	X_6	Dummy	IV
Marital Status-widowed	X_7	Dummy	IV
Basic Education	X_8	Dummy	IV
SHS/Technical Education	X_9	Dummy	IV
Tertiary Education	X_{10}	Dummy	IV
No Education	X_{11}	Dummy	IV
Indigene	X_{12}	Dummy	IV
Immigrant	X_{13}	Dummy	IV
Married	X_{14}	Dummy	IV
Rural Locality	X_{15}	Dummy	IV
Urban Locality	X_{16}	Dummy	IV
Farming	X_{17}	Dummy	IV
Non-Farming	X_{18}	Dummy	IV
Level of Participation	X_{19}	Categorical	IV
Number of children and Dependents	X_{20}	Continuous	IV
Knowledge of people use of funds	X_{21}	Dummy	IV
Support from Group members	X_{22}	Dummy	IV
Group formation- male only	X_{23}	Dummy	IV
Group formation - Female only	X_{24}	Dummy	IV
Group formation - training and peer selection	X_{25}	Dummy	IV
Group formation – peer selection, no training	X_{26}	Dummy	IV
Group formation – Mixed Gender	X_{27}	Dummy	IV
Group formation - Formed from an existing group	X_{28}	Dummy	IV
Group formation – Formed by MFI	X_{29}	Dummy	IV

[195] This variable was later recoded into different dummies reflecting the various marital categories

Appendix 5

Table 1: Clients' Participation in Product Design Processes * Name of Financial Institution Cross tabulation						
			Name of Financial Institution			Total
			SAT	CCU	SRB	
Level of Participation	High Participation	Count	7	24	13	44
		Expected Count	10.3	15.4	18.3	44.0
		Total	5.8%	20.0%	10.8%	36.7%
	Low Participation	Count	6	11	17	34
		Expected Count	7.9	11.9	14.2	34.0
		Total	5.0%	9.2%	14.2%	28.3%
	No Participation	Count	15	7	20	42
		Expected Count	9.8	14.7	17.5	42.0
		Total	12.5%	5.8%	16.7%	35.0%
Total		Count	28	42	50	120
		Expected Count	28.0	42.0	50.0	120.0
		Total	23.3%	35.0%	41.7%	100.0%

Source: Fieldwork Data (2017) Chi-square=0.004

There is strong evidence of a relationship between clients' level of participation and the financial institution they belong (Chi-square = 15.649, df = 4, $p < 0.01$)

Table 2: Clients' Participation in Product Design Processes * Gender of Respondent Cross tabulation					
			Gender of Respondent		Total
			Male	Female	
Clients' Participation in Product Design Processes	High Participation	Count	23	21	44
		Expected Count	21.3	22.7	44.0
		Total	19.2%	17.5%	36.7%
	Low Participation	Count	15	19	34
		Expected Count	16.4	17.6	34.0
		Total	12.5%	15.8%	28.3%
	No Participation	Count	20	22	42
		Expected Count	20.3	21.7	42.0
		Total	16.7%	18.3%	35.0%
Total		Count	58	62	120
		Expected Count	58.0	62.0	120.0
		Total	48.3%	51.7%	100.0%

Source: Fieldwork (2017)

Table 3: Clients' Participation in Product Design Processes * Gender of Respondent Crosstabs					
Name of Financial Institution			Gender of Respondent		Total
			Male	Female	
SAT	Level of Participation	High Participation	4 (14.3)	3 (10.7)	7(25)
		Low Participation	2(7.1)	4(14.3)	6(21.4)
		No Participation	8(28.6)	7(25)	15(53.6)
	Total		14 (50)	14(50)	28(100)
CCU	Level of Participation	High Participation	10(23.8)	14(33.3)	24(57.1)
		Low Participation	6(14.3)	5(11.9)	11(26.2)
		No Participation	4(9.5)	3(7.1)	7(16.7)
	Total		20(47.6)	22(52.4)	42(100)
SRB	Level of Participation	High Participation	9(18)	4(8)	13(26)
		Low Participation	7(14)	10(20)	17(34)
		No Participation	8(16)	12(24)	20(40)
	Total		24(48)	26(52)	50(100)

Source: Fieldwork Data (2017)
Note: All figures in the bracket(s) are in percent

Table 4: Name of Financial Institution * How was your group formed? Cross tabulation							
			How was your group formed?				Total
			Peer-Selection	NGO Support	Existing Group	Formed by MFI	
Name of Financial Institution	SAT	Count	13	2	4	9	28
		Expected Count	7.9	7.5	4.7	7.9	28.0
	CCU	Count	7	21	9	5	42
		Expected Count	11.9	11.2	7.0	11.9	42.0
	SRB	Count	14	9	7	20	50
		Expected Count	14.2	13.3	8.3	14.2	50.0
Total		Count	34	32	20	34	120
		Expected Count	34.0	32.0	20.0	34.0	120.0

Source: Fieldwork Data (2017) Chi-square=26.67 $p < 0.01$

Table 5: Support from Group Members * Status of locality Cross tabulation					
			Status of locality		Total
			Rural	Urban	
Support from Group Members	No	Count	14	35	49
		Expected Count	24.5	24.5	49.0
		% within Support from Group Members	28.6%	71.4%	100.0%
		% within Status of locality	23.3%	58.3%	40.8%
		Total	11.7%	29.2%	40.8%
	Yes	Count	46	25	71
		Expected Count	35.5	35.5	71.0
		% within Support from Group Members	64.8%	35.2%	100.0%
		% within Status of locality	76.7%	41.7%	59.2%
		Total	38.3%	20.8%	59.2%
Total		Count	60	60	120
		Expected Count	60.0	60.0	120.0
		% within Support from Group Members	50.0%	50.0%	100.0%
		% within Status of locality	100.0%	100.0%	100.0%
		Total	50.0%	50.0%	100.0%

Source: Fieldwork Data (2017) Chi-square=15.211 Sig at 0.000

Table 6: Status of locality * Knowledge of other Members' Use of Funds Cross tabulation					
			Knowledge of other Members' Use of Funds		Total
			No	Yes	
Status of locality	Rural	Count	29	31	60
		Expected Count	33.5	26.5	60.0
	Urban	Count	38	22	60
		Expected Count	33.5	26.5	60.0
Total		Count	67	53	120
		Expected Count	67.0	53.0	120.0

Source: Fieldwork (2017) Chi-square= 2.737 Sig at 0.098 df=1

Table 7: How was your group formed? * Knowledge of other Members' Use of Funds Crosstabulation					
			Knowledge of other Members' Use of Funds		Total
			No	Yes	
How was your group formed?	Peer-selection with No training	Count	20	15	35
		Expected Count	19.5	15.5	35.0
	Training and Peer-selection	Count	16	16	32
		Expected Count	17.9	14.1	32.0
	Formed from Existing Group	Count	8	9	17
		Expected Count	9.5	7.5	17.0
	Formed by MFI	Count	23	13	36
		Expected Count	20.1	15.9	36.0
Total		Count	67	53	120
		Expected Count	67.0	53.0	120.0

Source: Fieldwork (2017) Chi-square=1.944 p-value =0.584 df=3

Table 8: Name of Financial Institution * Support from Group Members Crosstabulation					
			Support from Group Members		Total
			No	Yes	
Name of Financial Institution	SAT	Count	18	10	28
		Expected Count	11.4	16.6	28.0
	CCU	Count	15	27	42
		Expected Count	17.2	24.9	42.0
	SRB	Count	16	34	50
		Expected Count	20.4	29.6	50.0
Total		Count	49	71	120
		Expected Count	49.0	71.0	120.0

Source: Fieldwork Data (2017) Chi-Square=8.445 sig. 0.015 df=2

Table 9: Gender of Respondent * Last Loan Amount (GHS) Crosstabulation							
			Last Loan Amount (GHS)				Total
			</= 500	501 to 600	601 to 700	>700	
Gender of Respondent	Male	Count	14	15	17	20	66
		Expected Count	18.2	14.9	13.2	19.8	66.0
	Female	Count	19	12	7	16	54
		Expected Count	14.9	12.2	10.8	16.2	54.0
Total		Count	33	27	24	36	120
		Expected Count	33.0	27.0	24.0	36.0	120.0

Source: Fieldwork Data (2017) Chi-square = 4.547 df=3 Significance = 0.208

Table 10: Table Name of Financial Institution * Last Loan Amount (GHS) Crosstabulation							
			Last Loan Amount (GHS)				Total
			</= 500	**501 to 600**	**601 to 700**	**> 700**	
Name of Financial Institution	SAT	Count	4	5	8	11	28
		Expected Count	7.7	6.3	5.6	8.4	28.0
	CCU	Count	18	10	8	6	42
		Expected Count	11.6	9.5	8.4	12.6	42.0
	SRB	Count	11	12	8	19	50
		Expected Count	13.8	11.3	10.0	15.0	50.0
Total		Count	33	27	24	36	120
		Expected Count	33.0	27.0	24.0	36.0	120.0

Source: Fieldwork Data (2017) Chi-square = 13.056 Significance = 0.042

Table 11: Name of Financial Institution * Nature of Loan Disbursement was convenient? Crosstabulation

			Nature of Loan Disbursement was convenient? No	Nature of Loan Disbursement was convenient? Yes	Total
Name of Financial Institution	SAT	Count	18	10	28
		Expected Count	14.0	14.0	28.0
	CCU	Count	14	28	42
		Expected Count	21.0	21.0	42.0
	SRB	Count	28	22	50
		Expected Count	25.0	25.0	50.0
Total		Count	60	60	120
		Expected Count	60.0	60.0	120.0

Source: Fieldwork (2017) $x^2 = 7.672$ Significance= 0.02

Table 12: Name of Financial Institution * Loan Repayment Matched with Business Cycle? Crosstabulation

			Loan Repayment Matched with Business Cycle? No	Loan Repayment Matched with Business Cycle? Yes	Total
Name of Financial Institution	SAT	Count	18	10	28
		Expected Count	12.6	15.4	28.0
	CCU	Count	8	34	42
		Expected Count	18.9	23.1	42.0
	SRB	Count	28	22	50
		Expected Count	22.5	27.5	50.0
Total		Count	54	66	120
		Expected Count	54.0	66.0	120.0

Source: Fieldwork (2017) Chi-square= 18.082 df=2 sig=0.000

Appendix 6

Table 1: Status of Locality * Which of the following is the primary Source or Cause of your Poverty? Crosstabulation							
Name of Financial Institution			Primary Source or Cause of your Poverty				Total
			Inadequate Finance	Lack of Employment	Poor Soil Fertility	Lack of Market Access	
SAT	Locality	Rural	6	2	5	1	14
		Urban	3	6	1	4	14
	Total		9	8	6	5	28
CCU	Locality	Rural	5	6	8	4	23
		Urban	6	7	2	4	19
	Total		11	13	10	8	42
SRB	Locality	Rural	11	8	3	8	30
		Urban	7	7	2	4	20
	Total		18	15	5	12	50

Source: Fieldwork Data (2017)

Table 2: Microfinance Contributions to clients' Business Outcomes * Status of locality * Name of Financial Institution Crosstabulation					
Name of Financial Institution			Status of Locality		Total
			Rural	Urban	
SAT	Microfinance Contributions to Outcomes	Very Much	5	2	7
		Somewhat	3	7	10
		Not at All	6	5	11
	Total		14	14	28
CCU	Microfinance Contributions to Outcomes	Very Much	11	8	19
		Somewhat	9	6	15
		Not at All	3	5	8
	Total		23	19	42
SRB	Microfinance Contributions to Outcomes	Very Much	17	5	22
		Somewhat	13	10	23
		Not at All	0	5	5
	Total		30	20	50
Total	Microfinance Contributions to Outcomes	Very Much	33	15	48
		Somewhat	25	23	48
		Not at All	9	15	24
	Total		67	53	120

Source: Fieldwork Data (2017)

Table 3: Occupation of the Household Head by Product meets your occupational needs? * Name of Financial Institution Crosstabulation

Name of Financial Institution			MFI's Product Meet Occupational Needs?		Total
			No	Yes	
SAT	Occupation Household Head	Farming	10(35.7)	6(21.4)	16(57.1)
		Non-Farming	3(10.7)	9(32.1)	12(42.9)
	Total		**13(46.4)**	**15(53.6)**	**28(100)**
CCU	Occupation Household Head	Farming	4(9.5)	20(47.6)	24(57.1)
		Non-Farming	7(16.7)	11(26.2)	18(42.9)
	Total		**13(31)**	**29(69)**	**42(100)**
SRB	Occupation Household Head	Farming	14(28)	11(22)	25(50)
		Non-Farming	9(18)	16(12)	25(50)
	Total		**23(46)**	**27(54)**	**50(100)**
Total	Occupation Household Head?	Farming	23(19.2)	42(25)	65(54.2)
		Non-Farming	27(22.5)	28(23.3)	55(45.8)
	Total		**50(41.7)**	**70(58.3)**	**120(100)**

Source: Fieldwork Data (2017)

Table 4: OLS Regression Coefficients for Clients' Participation in Microfinance Product Design Processes and Contribution to Household Outcome

Model		**Unstandardized Coefficients**		**Sig.**
		B		
	(Constant)	2.951 (2.499)**		0.014
	Control Variables Female-Dummy	0.023 (0.136)		0.892
	Household Size	-0.017 (-1.049)		0.297
	Basic Education-Dummy	-0.190 (-1.090)		0.278
	SHS/Technical-Dummy	-0.234 (-1.155)		0.251
	Tertiary-Dummy	-0.078 (-0.293)		0.770
	Indigene-Dummy	-0.509 (-2.404)**		0.018
	Married-Dummy	0.037 (0.166)		0.869
	Farming-Dummy	0.570 (2.108)**		0.037
	Non-Farming-Dummy	-0.138 (-0.891)		0.375
	Low Participation	0.364 (1.849)***		0.067
	No Participation	0.227 (1.275)		0.205

Dependent Variable: Contribution to HH Outcomes

Table 5: OLS Regression Coefficients for Clients' Participation in Microfinance Product Design Processes and Contribution to Business Outcome

Model	Unstandardized Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	15.200	2.748		5.531	0.000
Female-Dummy	-0.129	0.417	-0.031	-0.310	0.757
Non Farming-Dummy	-0.313	0.486	-0.075	-0.644	0.521
Low Participation	1.307	0.462	0.288	2.833	0.006
No Participation	0.972	0.439	0.222	2.213	0.029
Log Age	-1.522	0.697	-0.212	-2.183	0.031
Household size of Respondent	-0.039	0.040	-0.098	-0.974	0.332
Single-Dummy	-1.623	0.939	-0.206	-1.729	0.087
Separated/Divorced-Dummy	1.188	1.298	0.089	0.916	0.362
Basic Education-Dummy	-0.282	0.427	-0.065	-0.661	0.510
SHS/Technical-Dummy	0.063	0.506	0.012	0.125	0.901
Tertiary Education-Dummy	-0.249	0.674	-0.033	-0.370	0.712
Indigene-Dummy	-1.411	0.519	-0.248	-2.722	0.008
Married-Dummy	-0.025	0.602	-0.005	-0.042	0.967
Farming-Dummy	1.271	0.495	0.305	2.570	0.012
High Participation	0.614	0.405	0.141	1.516	0.133
Rural-Control	-0.477	0.395	-0.114	-1.207	0.230

Dependent Variable: Contribution to Business Outcomes

Table 6: OLS Regression Coefficients for Clients' Household Characteristics and Effect of Microfinance on Business Outcomes

Model		Unstandardized Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.583	2.716		5.001	0.000
	Farming-Dummy	0.454	0.351	0.111	1.291	0.199
	Single-Dummy	-2.800	1.302	-0.344	-2.150	0.034
	Married-Dummy	-0.818	1.128	-0.129	-0.725	0.470
	Widowed-Dummy	-1.612	1.542	-0.124	-1.045	0.298
	Basic Education-Dummy	0.144	0.681	0.034	0.212	0.832
	Immigrant-Dummy	1.882	0.524	0.338	3.591	0.001
	Log Age	-1.296	0.679	-0.180	-1.909	0.059
	Female-Dummy	0.101	0.621	0.023	0.162	0.872
	Log of HH size	-1.423	0.585	-0.419	-2.431	0.017
	Urban Locality	1.292	0.531	0.408	2.433	0.017
	SHS/Technical-Dummy	0.468	0.714	0.092	0.655	0.514
	No Education-Dummy	-1.054	0.602	-0.185	-1.751	0.083
	RURAL	-0.497	0.566	-0.119	-0.877	0.382

a. Dependent Variable: Contribution to Business Outcomes

Table 7: OLS Regression Coefficients for Group Formation Characteristics and Effects on Clients' Business Outcomes

Model		Unstandardized Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.387	1.137		8.253	0.000
	Gender of Respondent	0.073	0.378	0.017	0.193	0.847
	Age of Respondent	-0.050	0.016	-0.271	-3.047	0.003
	Number of Children and Legal Dependants?	0.919	0.360	0.261	2.551	0.012
	Knowledge of other Members' Use of Funds	-0.691	0.341	-0.165	-2.024	0.045
	Support from Group Members	0.331	0.369	0.078	0.895	0.373
	Formed by MFI	0.932	0.451	0.204	2.069	0.041
	Household Size	-0.601	0.844	-0.142	-0.712	0.478
	Formed from existing Group	0.251	0.547	0.042	0.459	0.647
	Marital status of Respondent	0.362	0.274	0.110	1.323	0.189
	Male Only Group	-0.790	0.692	-0.190	-1.142	0.256
	Female Only Group	1.095	0.440	0.250	2.491	0.014
	Training and Peer-selection	1.251	0.553	0.266	2.261	0.026
	Peer-Selection No Training	-0.112	0.040	-0.282	-2.794	0.006

Dependent Variable: Contribution to Business Outcomes

Table 8: OLS Regression Coefficients for Group Formation Characteristics and Effects on Clients' Household Outcomes

Model		Unstandardized Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.154	0.441		7.160	0.000
	Gender of Respondent	-0.023	0.149	-0.015	-0.152	0.880
	Age of Respondent	-0.006	0.006	-0.090	-0.965	0.337
	Marital status of Respondent	0.073	0.108	0.061	0.674	0.501
	Knowledge of other Members' Use of Funds	0.052	0.135	0.034	0.384	0.702
	Support from Group Members	0.186	0.145	0.122	1.286	0.201
	Male Only Group	-0.579	0.204	-0.313	-2.839	0.005
	Female Only Group	0.569	0.178	0.360	3.196	0.002
	Mixed Gender	0.128	0.138	0.084	0.928	0.356
	Formed from existing Group	0.160	0.199	0.074	0.804	0.423
	Formed by MFI	0.210	0.161	0.127	1.299	0.197
	Peer-Selection No Training	-0.029	0.015	-0.205	-1.991	0.049

a. Dependent Variable: Contribution to HH Outcomes

Table 9: Ordinal Logistic Regression Coefficients for Characteristics of Credit Design and Effect on Clients' Business Outcomes

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[BusinessOutCome = 1]	-2.326	0.647	12.926	1	0.000	-3.594	-1.058
	[BusinessOutCome = 2]	-0.139	0.607	0.053	1	0.819	-1.329	1.051
Location	[CreditElsewhere01=0]	0.736	0.504	2.137	1	0.144	-0.251	1.724
	[CreditElsewhere01=1]	0[a]			0			
	[Loan Eligibility=0]	-0.098	0.444	0.048	1	0.826	-0.969	0.774
	[Loan Eligibility=1]	0.175	0.473	0.136	1	0.712	-0.753	1.102
	[Loan Eligibility=2]	0[a]			0			
	[LoanAmount=0]	-1.418	0.493	8.275	1	0.004	-2.384	-0.452
	[LoanAmount=2]	-0.334	0.497	0.452	1	0.501	-1.309	0.640
	[LoanAmount=3]	-0.536	0.522	1.055	1	0.304	-1.558	0.487
	[LoanAmount=4]	0[a]			0			
	[LoanInterest=0]	-0.239	0.478	0.251	1	0.617	-1.175	0.697
	[LoanInterest=1]	-0.636	0.494	1.659	1	0.198	-1.604	0.332
	[LoanInterest=2]	0[a]			0			
	[CreditDisbursement=0]-No	-1.458	0.531	7.542	1	0.006	-2.498	-0.417
	[CreditDisbursement=1]-Yes	0[a]			0			
	[CreditRepayment=0]	0.892	0.529	2.841	1	0.092	-0.145	1.928
	[CreditRepayment=1]	0[a]			0			
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

Table 10: Ordinal Logistic Regression Coefficients for Characteristics of Credit Design and Effect on Clients' Household Outcomes

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[HouseholdOutCome = 1]	-1.788	0.634	7.964	1	0.005	-3.030	-0.546
	[HouseholdOutCome = 2]	0.485	0.611	0.631	1	0.427	-0.712	1.682
Location	[CreditElsewhere01=0]	0.491	0.499	0.970	1	0.325	-0.487	1.470
	[CreditElsewhere01=1]	0[a]			0			
	[Loan Eligibility=0]	-0.160	0.447	0.128	1	0.721	-1.036	0.716
	[Loan Eligibility=1]	0.674	0.480	1.967	1	0.161	-0.268	1.615
	[Loan Eligibility=2]	0[a]			0			
	[LoanAmount=0]	-1.161	0.492	5.561	1	0.018	-2.127	-0.196
	[LoanAmount=2]	-0.010	0.497	0.000	1	0.983	-0.985	0.964
	[LoanAmount=3]	-0.286	0.522	0.300	1	0.584	-1.310	0.738
	[LoanAmount=4]	0[a]			0			
	[LoanInterest=0]	-0.295	0.480	0.377	1	0.539	-1.235	0.646
	[LoanInterest=1]	-0.802	0.498	2.600	1	0.107	-1.777	0.173
	[LoanInterest=2]	0[a]			0			
	[CreditDisbursement=No]	-1.854	0.542	11.687	1	0.001	-2.917	-0.791
	[CreditDisbursement=1]	0[a]			0			
	[CreditRepayment=0]	1.199	0.536	5.002	1	0.025	0.148	2.249
	[CreditRepayment=1]	0[a]			0			
Link function: Logit.								

Table 11: Ordinal Logistic Regression Coefficients for Characteristics of Savings Design and Effect on Clients' Business Outcomes								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	Business Outcome (1)	-0.661	1.776	0.138	1	0.710	-4.142	2.820
	Business Outcome (2)	1.961	1.794	1.195	1	0.274	-1.555	5.477
Location	Age	0.013	0.019	0.446	1	0.504	-0.025	0.050
	HHSizeCat	0.127	0.364	0.122	1	0.726	-0.586	0.841
	Gender [1]	-0.785	0.482	2.653	1	0.103	-1.729	0.159
	Gender [2]	0[a]			0			
	Locality Status [0]	1.704	0.492	11.994	1	0.001	0.740	2.669
	Locality Status [1]	0[a]			0			
	Occupation [1]	0.177	0.414	0.183	1	0.669	-0.634	0.989
	[Occupation=2]	0[a]			0			
	[Reasons_Saving=1]	-1.232	0.663	3.451	1	0.063	-2.533	0.068
	[Reasons_Saving=2]	0.413	0.734	0.316	1	0.574	-1.026	1.851
	[Reasons_Saving=3]	-0.503	0.767	0.431	1	0.512	-2.006	0.999
	[Reasons_Saving=4]	-0.852	0.729	1.367	1	0.242	-2.281	0.576
	[Reasons_Saving=5]	0[a]			0			
	[Assess_Savings=1]	-1.028	0.583	3.112	1	0.078	-2.170	0.114
	[Assess_Savings=2]	-1.929	0.616	9.813	1	0.002	-3.136	-0.722
	[Assess_Savings=3]	0[a]			0			
	[Savings Collection=1]	1.371	1.593	0.740	1	0.390	-1.752	4.493
	[Savings Collection=2]	1.105	0.587	3.542	1	0.060	-0.046	2.256
	[Savings Collection=3]	0[a]			0			
	[Interest_on_Savings=1]	-0.833	1.319	0.399	1	0.528	-3.417	1.752
	[Interest_on_Savings=2]	-1.182	0.568	4.327	1	0.038	-2.295	-0.068
	[Interest_on_Savings=3]	0[a]			0			
	[Capital_Formation=1]	-1.355	0.525	6.654	1	0.010	-2.385	-0.326
	[Capital_Formation=2]	-0.772	0.509	2.297	1	0.130	-1.770	0.226
	[Capital_Formation=3]	0[a]			0			
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

Table 12: Ordinal Logistic Regression Coefficients for Characteristics of Savings Design and Effect on Clients' Household Outcomes								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[HouseholdOutCome = 1]	-2.209	2.131	1.074	1	0.300	-6.385	1.968
	[HouseholdOutCome = 2]	0.320	2.125	0.023	1	0.880	-3.845	4.486
Location	Age	-0.010	0.018	0.338	1	0.561	-0.046	0.025
	[Locality Status=0]	0.493	0.455	1.174	1	0.279	-0.399	1.384
	[Locality Status=1]	0[a]			0			
	[Gender =1]	-0.368	0.445	0.685	1	0.408	-1.241	0.504
	[Gender =2]	0[a]			0			
	[Capital Formation1=1]	-1.394	0.614	5.147	1	0.023	-2.597	-0.190
	[Capital_Formation1=2]	1.324	0.597	4.917	1	0.027	0.154	2.495
	[Capital_Formation1=3]	0[a]			0			
	[Savings Collection=1]	2.828	1.653	2.927	1	0.087	-0.412	6.069
	[Savings Collection=2]	0.697	0.581	1.443	1	0.230	-0.440	1.835
	[Savings Collection=3]	0[a]			0			
	[Assess_Savings=1]	1.102	0.563	3.826	1	0.050	-0.002	2.205
	[Assess_Savings=2]	0.032	0.571	0.003	1	0.956	-1.088	1.151
	[Assess_Savings=3]	0[a]			0			
	[Reasons for Saving=1]	-0.595	0.623	0.912	1	0.340	-1.816	0.626
	[Reasons for Saving=2]	1.395	0.702	3.946	1	0.047	0.019	2.772
	[Reasons for Saving=3]	0.068	0.748	0.008	1	0.928	-1.399	1.534
	[Reasons_Saving=4]	0.481	0.674	0.509	1	0.476	-0.840	1.802
	[Reasons_Saving=5]	0[a]			0			
Link function: Logit.								

Table 13: Ordinal Logistic Regression Coefficients for Asset Ownership and Effect on Clients' Business Outcomes								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Business Outcome=1]	-21.157	1.896	124.483	1	0.000	-24.873	-17.440
	[Business Outcome=2]	-18.587	1.884	97.378	1	0.000	-22.279	-14.896
	[Occupation=1]	0.432	0.456	0.899	1	0.343	-0.461	1.325
	[Occupation=2]	0[a]			0			
	[bicycle=0]	1.446	0.532	7.388	1	0.007	0.403	2.488
	[bicycle=1]	0[a]			0			
	[Human Capital=1]	-17.980	0.723	618.503	1	0.000	-19.397	-16.563
	[Human Capital =2]	-18.558	0.504	1355.479	1	0.000	-19.546	-17.570
	[Human Capital =3]	-19.285	0.000		1		-19.285	-19.285
	[Human Capital =4]	0[a]			0			
	[Financial Capital=1]	1.333	0.674	3.914	1	0.048	0.012	2.654
	[Financial Capital =2]	0.109	0.504	0.047	1	0.829	-0.879	1.097
	[Financial Capital =3]	0[a]			0			
	[Social Capital=1]	-2.834	0.706	16.111	1	0.000	-4.219	-1.450
	[Social Capital=2]	-0.457	0.471	0.943	1	0.332	-1.379	0.465
	[Social Capital=3]	0[a]			0			
	[Physical Capital=1]	-2.283	0.733	9.701	1	0.002	-3.720	-0.846
	[Physical Capital=2]	-0.466	0.468	0.993	1	0.319	-1.382	0.450
	[Physical Capital=3]	0[a]			0			
Link function: Logit.								

Table 14: Ordinal Logistic Regression Coefficients for Asset Ownership and Effect on Clients' Household Outcomes

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Household Outcomes = 1]	18.643	2.126	76.883	1	0.000	14.476	22.811
	[Household Outcomes = 2]	20.822	2.136	95.021	1	0.000	16.635	25.008
Location	Age	-0.025	0.019	1.831	1	0.176	-0.062	0.011
	[Gender =1]	-0.197	0.461	0.183	1	0.669	-1.101	0.707
	[Gender =2]	0[a]			0			
	[Occupation=1]	0.618	0.445	1.932	1	0.165	-0.253	1.489
	[Occupation=2]	0[a]			0			
	[Maristat=1]	0.308	1.573	0.038	1	0.845	-2.774	3.390
	[Maristat=2]	-0.178	1.314	0.018	1	0.892	-2.752	2.397
	[Maristat=4]	-0.707	1.791	0.156	1	0.693	-4.217	2.803
	[Maristat=5]	0[a]			0			
	[Physical Capital=1]	-2.824	0.853	10.952	1	0.001	-4.496	-1.151
	[Physical Capital=2]	-0.669	0.510	1.719	1	0.190	-1.668	0.331
	[motor cycle=0]	0.948	0.444	4.560	1	0.033	0.078	1.818
	[motor cycle=1]	0[a]			0			
	[truck=0]	18.537	0.000		1		18.537	18.537
	[truck=1]	0[a]			0			

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Table 15: Contribution to Household Outcomes * What is the occupation of the Household Head? * Name of Financial Institution Crosstabulation						
Name of Financial Institution				**Occupation of Household Head**		**Total**
				Farming	**Non-Farming**	
SAT	**Household Outcomes**	Very Much	Count	2	7	9
		Somewhat	Count	7	4	11
		Not at All	Count	7	1	8
	Total		**Count**	**16**	**12**	**28**
CCU	**Household Outcomes**	Very Much	Count	15	3	18
		Somewhat	Count	5	6	11
		Not at All	Count	4	9	13
	Total		**Count**	**24**	**18**	**42**
SRB	**Household Outcomes**	Very Much	Count	7	6	13
		Somewhat	Count	10	12	22
		Not at All	Count	8	7	15
	Total		**Count**	**25**	**25**	**50**
Total	**Household Outcomes**	Very Much	Count	24	16	40
		Somewhat	Count	22	22	44
		Not at All	Count	19	17	36
	Total		**Count**	**65**	**55**	**120**

Source: Fieldwork Data (2017) Relationships are statistically significant for SAT and CCU, Chi-Square=7.681 p<0.05; chi-square=9.348 p<0.01

Table 16: Loan Repayment Matched with Business Cycle? * Contribution to Business Outcomes * Name of Financial Institution

Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Loan Repayment Matched with Business Cycle?	No	Count	3(10.7)	6	9(32.1)	18(64.3)
		Yes	Count	1(3.6)	4(14.3)	5(17.9)	10(35.7)
	Total		Count	4(14.3)	10(35.7)	14(50)	28(100)
CCU	Loan Repayment Matched with Business Cycle?	No	Count	4(9.5)	2(4.8)	2(4.8)	8(19)
		Yes	Count	15(35.7)	13(30.2)	6(14.3)	34(79)
	Total		Count	19(44.2)	15(35.7)	8(15.1)	42(100)
SRB	Loan Repayment Matched with Business Cycle?	No	Count	11(22)	4(8)	13(26)	28(56)
		Yes	Count	11(22)	10(20)	1(2)	22(44)
	Total		Count	22(44)	14(28)	14(28)	50(100)
Total	Loan Repayment Matched with Business Cycle?	No	Count	18(15)	12(10)	24(20)	54(45)
		Yes	Count	27(22.5)	27(22.5)	12(10)	66(55)
	Total		Count	45(37.5)	48(40)	27(22.5)	120(100)

Table 17: How do you Assess Interest Charged on Loans? * Contribution to Business Outcomes * Name of Financial Institution							
Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Loan Interest Payment	Favourable	Count	0(0)	2(7.1)	5(17.9)	7(25)
		Moderately Favourable	Count	1(3.6)	3(10.7)	4(14.3)	8(28.6)
		Not Favourable	Count	3(10.7)	5(17.9)	5(17.9)	13(46.4)
	Total		Count	4(14.3)	10(35.7)	14(50)	28(100)
CCU	Loan Interest Payment	Favourable	Count	10(23.8)	11(26.2)	1(2.4)	22(52.4)
		Moderately Favourable	Count	4(9.5)	4(9.5)	4(9.5)	12(28.6)
		Not Favourable	Count	5(11.9)	0(0)	3(7.1)	8(19)
	Total		Count	19(45.2)	15(35.7)	8(19)	42(100)
SRB	Loan Interest Payment	Favourable	Count	7(14)	4(8)	1(2)	12(24)
		Moderately Favourable	Count	4(8)	5(10)	0(0)	9(18)
		Not Favourable	Count	4(8)	14(28)	11(22)	29(58)
	Total		Count	15(30)	23(46)	12(24)	50(100)
Total	Loan Interest Payment	Favourable	Count	17(14.2)	17(14.2)	7(5.8)	41(34.2)
		Moderately Favourable	Count	9(7.5)	12(10)	8(6.7)	29(24.2)
		Not Favourable	Count	12(10)	19(15.8)	19(15.8)	50(41.6)
	Total		Count	38(31.7)	48(40)	27(22.5)	120(100)

Relationship significant only for CCU X=10.181 P=0.037

Table 18: Schedule of Loan Disbursement consistent with Livelihood cycle? * Contribution to Business Outcomes * Name of Financial Institution

Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Is Loan Disbursement convenient?	No	Count	3(10.7)	9(32.1)	6(21.4)	18(64.3)
		Yes	Count	8(28.6)	1(3.6)	1(3.6)	10(35.7)
	Total		Count	4(14.3)	10(35.7)	14(50)	28(100)
CCU	Is Loan Disbursement convenient?	No	Count	5(11.9)	6(14.3)	3(7.1)	14(33.3)
		Yes	Count	14(33.3)	9(21.4)	5(11.9)	28(66.6)
	Total		Count	19(45.2)	15(35.7)	8(19)	42(100)
SRB	Is Loan Disbursement convenient?	No	Count	9(18)	3(6)	12(24)	24(48)
		Yes	Count	13(26)	11(22)	2(4)	26(52)
	Total		Count	22(44)	23(46)	5(10)	50(100)
Total	Is Loan Disbursement convenient?	No	Count	17(14.2)	18(15)	21(24)	56(46.7)
		Yes	Count	35(29.2)	21(17.5)	8(6.7)	64(53.3)
	Total		Count	45(37.5)	48(40)	27(22.5)	120(100)

Relationship significant only for SAT X=5.880 P=0.053

Table 19: Eligibility Criteria for Individual Loans * Contribution to Business Outcomes * Name of Financial Institution

Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Eligibility Criteria for Loans	Flexible	Count	1(3.6)	3(10.7)	1(3.6)	5(17.9)
		Moderately Flexible	Count	1(3.6)	3(10.7)	5(17.9)	9(32.1)
		Not Flexible	Count	2(7.1)	4(14.3)	8(28.6)	14(50)
	Total		Count	4(14.3)	10(35.7)	14(50)	28(100)
CCU	Eligibility Criteria for Loans	Flexible	Count	12(28.6)	5(11.9)	7(16.6)	24(57.1)
		Moderately Flexible	Count	6(14.3)	7(16.6)	0(0)	13(31)
		Not Flexible	Count	1(2.4)	3(7.1)	1(2.4)	5(11.9)
	Total		Count	19(45.2)	15(35.7)	8(19)	42(100)
SRB	Eligibility Criteria for Loans	Flexible	Count	2(4)	3(6)	1(2)	6(12)
		Moderately Flexible	Count	8(16)	8(16)	1(1)	17(34)
		Not Flexible	Count	12(24)	12(24)	3(6)	27(54)
	Total		Count	22(44)	23(46)	5(10)	50(100)
Total	Eligibility Criteria for Loans	Flexible	Count	15(12.5)	11(9.2)	9(7.5)	35(29.2)
		Moderately Flexible	Count	15(12.5)	18(15)	6(5)	39(32.5)
		Not Flexible	Count	15(12.5)	19(15.8)	12(10)	46(38.3)
	Total		Count	45(37.5)	48(40)	27(22.5)	120(100)

Relationship significant only for CCU X=8.106 P=0.08

Table 20: Why Do you Save? * Contribution to Business Outcomes * Name of Financial Institution							
Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Why Do you Save?	For HH Emergencies	Count	0	3	2	5
		Payback Loans	Count	3	5	7	15
		Business Expansion	Count	0	0	3	3
		Buy Farm Inputs	Count	1	1	2	4
		Safe Keeping	Count	0	1	0	1
	Total		Count	4	10	14	28
CCU	Why Do you Save?	For HH Emergencies	Count	2	2	5	9
		Payback Loans	Count	1	0	3	4
		Business Expansion	Count	6	8	2	16
		Buy Farm Inputs	Count	1	3	3	7
		Safe Keeping	Count	4	2	0	6
	Total		Count	14	15	13	42
SRB	Why Do you Save?	For HH Emergencies	Count	7	0	14	21
		Payback Loans	Count	3	3	1	7
		Buy Farm Inputs	Count	7	4	3	14
		Safe Keeping	Count	5	2	1	8
	Total		Count	22	9	19	50

Source: Fieldwork Data (2017) Chi-square=19.558 $p<0.05$ for CCU

Table 21: How do you Assess the Flexibility of Savings Product Offered by your MF? * Contribution to Business Outcomes * Name of Financial Institution							
Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Assessment of Savings Product	Satisfactory	Count	1(3.6)	3(10.7)	1(3.6)	5(17.9)
		Moderately Satisfactory	Count	0(0)	2(7.1)	8(28.6)	10(35.7)
		Not Satisfactory	Count	3(10.7)	5(17.9)	5(17.9)	13(46.4)
	Total		Count	4(14.3)	10(35.7)	14(50)	28(100)
CCU	Assessment of Savings Product	Satisfactory	Count	9(21.4)	7(16.6)	2(4.8)	18(42.9)
		Moderately Satisfactory	Count	6(14.3)	4(9.5)	4(9.5)	14(33.3)
		Not Satisfactory	Count	4(9.5)	4(9.5)	2(4.8)	10(23.8)
	Total		Count	19(45.2)	15(35.7)	8(19)	42(100)
SRB	Assessment of Savings Product	Satisfactory	Count	9(18)	13(26)	3(6)	25(50)
		Moderately Satisfactory	Count	8(16)	6(12)	2(4)	16(32)
		Not Satisfactory	Count	5(10)	4(8)	0(0)	9(18)
	Total		Count	22(44)	23(46)	5(10)	50(100)

Source: Fieldwork Data (2017)

Table 22: How do you Assess the Interest Payment on your Deposit Account? * Contribution to Business Outcomes * Name of Financial Institution

Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Assessment of the Interest on Deposit Account	Satisfactory	Count	0	0	3	**3(10.7)**
		Moderately Satisfactory	Count	1	4	3	**8(28.6)**
		Not Satisfactory	Count	3	6	8(28.6)	**17(60.7)**
	Total		Count	4(14.3)	10(35.7)	14(50)	**28(100)**
CCU	How do you Assessment of the Interest on Deposit Account	Satisfactory	Count	2	1	1	**4(9.5)**
		Moderately Satisfactory	Count	5	3	0	**8(19)**
		Not Satisfactory	Count	7	10	13(31)	**30(71.4)**
	Total		Count	14	14	14	**42(100)**
SRB	Assessment of the Interest on Deposit Account	Satisfactory	Count	0	2	2	**4(8)**
		Moderately Satisfactory	Count	5	6	0	**11(22)**
		Not Satisfactory	Count	3	12	20(40)	**35(70)**
	Total		Count	8	20	22	**50(100)**

Source: Fieldwork Data (2017) SRB Chi-square=9.767 p<0.05

Table 23: Knowledge of other Members' Use of Funds * Contribution to Business Outcomes * Name of Financial Institution Crosstabulation

Name of Financial Institution				Contribution to Business Outcomes			Total
				Very Much	Somewhat	Not at All	
SAT	Knowledge of other Members' Use of Funds	No	Count	1	8	5(17.9)	14(50)
		Yes	Count	3	2	9(32.1)	14(50)
	Total		Count	4(14.3)	10(35.7)	14(50)	28(100)
CCU	Knowledge of other Members' Use of Funds	No	Count	5	5	3(7.1)	13(31)
		Yes	Count	14	10	5(11.9)	29(69)
	Total		Count	19	15	8(19)	42(100)
SRB	Knowledge of other Members' Use of Funds	No	Count	17	14	5(10)	36(72)
		Yes	Count	5	0	9(18)	14(28)
	Total		Count	22	23	14(28)	50(100)
Total	Knowledge of other Members' Use of Funds	No	Count	23	27	13(10.8)	63(52.5)
		Yes	Count	22	12	23(19.2)	57(47.5)
	Total		Count	45	48	27(22.5)	120(100)

Source: Fieldwork Data (2017)

Table 24: How was your group formed? * Contribution to Business Outcomes * Name of Financial Institution Crosstabulation							
Name of Financial Institution				**Contribution to Business Outcomes**			Total
				Very Much	Somewhat	Not at All	
SAT	How was your group formed?	Peer-selection (No training)	Count	0	4	9(32.1)	13(46.2)
		Training and Peer-selection	Count	0(0)	1	1(3.6)	2(7.1)
		Formed from Existing Group	Count	1(3.6)	2	1(3.6)	4(14.3)
		Formed by MFI	Count	3(10.7)	3	3(10.7)	9(32.1)
	Total		Count	4	10	14(50)	28(100)
CCU	How was your group formed?	Peer-selection (No training)	Count	2	4	2(4.8)	8(19)
		Training and Peer-selection	Count	10(23.8)	7	4(9.5)	21(50)
		Formed from Existing Group	Count	2(4.8)	2	2(4.8)	6(14.3)
		Formed by MFI	Count	5(11.9)	2	0(0)	7(16.6)
	Total		Count	19	15	8(19)	42(100)
SRB	How was your group formed?	Peer-selection (No training)	Count	0	3	11(22)	14(28)
		Training and Peer-selection	Count	6(12)	1	2(4)	9(18)
		Formed from Existing Group	Count	3(6)	4	0(0)	7(14)
		Formed by MFI	Count	7(14)	10(20)	3(6)	20(40)
	Total		Count	16	18	16(32)	50(100)

Source: Fieldwork Data (2017), significant for only SRB Chi-Square=13.262 $p < 0.05$ (0.039)

Appendix 7: Interview Guide

This interview guide is designed to collect information on how microfinance products are designed and implemented from the perspective of clients of SAT, CCU and SRB. Generally, the interview took a semi-structured outlook, with follow-up questions aimed to reveal knowledge in line with the various research questions and objectives. Each interview lasted between 30 minutes to about an hour.

Clients' Perception of Poverty

1. How do you perceive is poverty from the perspective of a client? (How does it manifest?).
2. Can you describe some of the characteristics of household poverty? (Probe on specific features that reflect the clients' geographical and household context).
3. What are the causes of your household poverty? (Probe: whether the design of microfinance products and services reflects the causes of poverty).
4. How will you describe the effect of the microfinance interventions on your household?

Participation in Product and Implementations Design Processes

1. How have you been involved or consulted in the processes leading to the design and implementation of financial products?
2. At what stage of the design processes did your MFI consult you? (Probe to find out if their views were taken into context following the consultation)
3. How are women, young, and other vulnerable persons involved in the product and implementation processes? (Probe to establish how women, particularly the elderly, widowed and people with disabilities are involved).

Clients' Poverty Context: Livelihoods, Vulnerability, Coping Mechanism

1. How is microfinance services designed to reflect you livelihood activities? (Probe to establish if there are specific products designed for various livelihood strategies of clients' household?
2. How does the current structure of microfinance products and implementation help clients reflect their vulnerabilities? (Probe to establish the household vulnerabilities how they affect household resilience or susceptibility to poverty)
3. How does your financial institution help you cope with livelihood shocks or vulnerabilities? (Probe to know how household coping mechanisms affect their ability to recover from shocks if their MFI provides financial services).

Group Formation and management

1. Comment on how you became a member of your current group (Probe on the formation strategies and the role played by MFIs and other NGOs)
2. How are decisions made in your group? (Probe if they have vulnerable and young persons in the group, if yes, find out how they are involved in decision-making processes).
3. How do group members support each other in their loan management and other livelihood activities?
4. Can you comment on the benefits to your household and livelihood activities?

Non-financial Services

1. What additional services and support do you need besides financial services from your MFI? (Probe if the MFI is currently providing other complementing services to clients', e.g. health, financial literacy).
2. How can the government support clients with non-financial services to augment services provided by MFIs? (Probe to establish if the client/household has access to critical social amenities).
3. How accessible are the services of government-allied agencies that provide agricultural extension support to farmers (veterinary services department and crop extension department)?
4. Which other non-financial services do you require to complement the support you receive from MFIs? (Seek more explanation).

Individual Loans

1. How will you describe the processes involved in accessing credit with your MFI? (Probe on specific impediments such collateral requirement, guarantorship, etc.).
2. How flexible are the features or terms of the credit for your household and livelihood activities? (Explain convenience in disbursement, repayment).
3. Can you comment on the size of loans you have accessed in the past 12 months and how that affects your poverty outcomes?
4. How will you assess the interest rates charged on loans?

Savings

1. What are the various categories of savings products offered by your MFI? (Probe: group-savings, personal savings, voluntary, compulsory).
2. How do you assess the interest payment on your deposit account?
3. How will you assess the various savings products offered by your MFI? (Probe: flexibility, convenience and proximity).
4. What motivates you to save? (Probe: mitigating shocks, vulnerabilities, investments).

Appendix 8: Interview Guide for Staff of Financial Institutions

This interview guide is designed to collect information on how microfinance products are designed and implemented from the perspective of the staff of SAT, CCU and SRB, especially in the implementation processes of the interventions. Generally, the interview took a semi-structured outlook, with follow-up questions aimed to reveal knowledge in line with the various research questions and objectives. Each interview lasted between 30 minutes to about an hour.

1. What are the objectives behind the establishment of your financial institution, and how are these objectives consistent with the needs of your clients?
2. How do your financial institution design and implement financial products that reflect the poverty context and needs of clients?
3. Can you describe some of the key considerations taken into account when designing new products for poverty reduction?
4. How does your financial institution ensure that clients' and prospective clients participate in the product design processes and review of existing products?
5. How are women, young, and other vulnerable persons involved in the product and implementation processes? (Probe to establish how women, particularly the elderly, widowed and people with disabilities are involved).
6. What are some of the requirements clients' need to meet to access credits from your financial institution?
7. What kind of support do you give to joint-liability groups?
8. How will you describe as the significant contributions of your financial institutions on the lives of clients and their households?
9. What additional services and support do you provide to clients' besides financial services? (Probe if the MFI is currently providing other complementing services to clients', e.g. health, financial literacy).
10. In your opinion, what should be done to make microfinance work sustainably for poverty reduction?

Appendix 9: Focus Group Discussion Guide

The FGD for this study was designed a deliberate strategy to bring people from similar lived-experiences and background to discuss specific issues of interest on how microfinance products are designed and implemented for poverty reduction. A total of ten (10) FGDs were organised, with a maximum of six (6) participants, and moderated by the researcher.

1. How will you describe your involvement in the product design and implementation processes of microfinance?
2. How will you describe your household poverty context?
3. What are some of the livelihood vulnerabilities you face as a household, and how are these vulnerabilities managed?
4. How adequate are financial services offered by your institution in addressing livelihood shocks?
5. What are some of the challenges (demand-side factors) you face accessing services from MFIs? (*Probe:* What challenges are embedded in the product design that affects your ability to reduce poverty?)
6. In your opinion, how can the challenges you face accessing microfinance services be addressed?
7. How can the microfinance market be designed to work sustainably for the poor?
8. Do you think MFIs are adequately regulated by the government and/or the regulatory agencies?

Appendix 10: Survey Questionnaire

RETHINKING THE DESIGN AND IMPLEMENTATION OF FINANCIAL SERVICES FOR POVERTY REDUCTION: A CASE OF NORTHERN GHANA

This questionnaire is being used to elicit information about Microfinance Institutions (MFIs) and Poverty Targeting in the Jirapa District of Northern Ghana. The survey is targeting clients of SAT, CCU, and SRB, and aims to use this questionnaire to elicit information relating to the design and implementation of financial services for poverty reduction. The purpose of the survey is to reveal knowledge on the poverty reduction implication of MFIs and mainly linked to the institutional designs of MFIs (what MFIs are set out to do) against what they are implementing on the grounds. This survey is not meant to 'judge' if a response is right or wrong but seek to reveal knowledge on the contextual issues what could be done to make MFIs and their clients work together for the social good of poverty reduction. As a result, you are kindly requested to be candid in your responses. I must assure you that all the responses you give will be treated with the strictest confidentiality. Thank you.

Name of Financial Institution	SAT....1 CCU......2 SRB........3		
Name locality			
District	Willing to be Interviewed?	YES	NO
Date of questionnaire administration Respondent ID |___|___|___| Phone number…………………………	| | | | | | | | | | |		

1. Gender of respondent 1. Male [ ] 2. Male [ ]
2. What is your age? |__|__|__|
3. What is your marital status? 1. Single [ ] 2. Married (mono) [ ] 3. Married (poly) [ ] 4. Widowed [ ] 5. Separated/divorced [ ] 6. Cohabitating [ ]
4. Number of children and legal dependants of the respondent |__|__|
5. What is the highest grade you have completed? 1. Primary/JSS [ ] 2. SHS [ ] 3. Technical/Voc [ ] 4. Tertiary [ ] 5. No education [ ] 6. Others, specify……………………...
6. Are all children ages 5 to 12 in this household in school? 1. Yes, or no child ages between 5 to 12 [ ] 2. No [ ]
7. Is the main job of the household head in agriculture? 1. Male head/spouse has no job [ ] 2. Yes, the main job is in agriculture [ ] 3. No, the main job is not in agriculture [ ] 4. No household head [ ]
8. What economic activities are you engaged? 1. Farming [ ] 2. Brewing pito [ ] 3. Artisan [ ] 4. Petty trading [ ] 5. Paid employee [ ] 6. Others specify…………………………………
9. How will you assess the contribution of the following livelihood assets to your household poverty outcomes?
10. Human capital (human resource, labour) 1. Very much [ ] 2. Somewhat [ ] 3. Not at all [ ]
11. Natural capital (farming land, water bodies, commercial trees, etc.) 1. Very much [ ] 2. Somewhat [ ] 3. Not at all [ ]
12. Financial capital (e.g. inherited funds, loans, savings etc.) Very much [ ] 2. Somewhat [ ] 3. Not at all [ ]

13. Social capital (friends, family etc.) Very much [ ] 2. Somewhat [ ] 3. Not at all [ ]
14. Physical capital (building, equipment, bicycle, and plough, etc.) 1. Very much [ ] 2. Somewhat [ ] 3. Not at all [ ]
15. What is your main cause or source of poverty? 1. Inadequate finance [ ] 2. Unemployment [ ] 3. Poor soil fertility [ ] 4. Lack of market access [ ] 5. Large HH Size [ ] 6. Others [ ]
16. Do the products and services of the financial institutions reflect your poverty context and needs? 1. Yes [ ] 2. No [ ]
17. What is the main livelihood activity/strategy among most clients'? 1. Crop farming [ ] 2. Livestock rearing [ ] 3. Mixed farming [ ] 4. Petty trading [ ] 5. Regular job [ ]
18. Do the current MFI products and services help clients' manage or cope with livelihood shocks? 1. Yes [ ] 2. No [ ]
19. What is the main household shock experienced in the past 24 months by clients'? 1. Death in HH [ ] 2. Illness/Injury [ ] 3. Loss of Livestock [ ] 4. Poor harvest [ ] 5. Other shocks [ ]
20. What is your household's main coping mechanism/strategy to shocks? 1. Borrow from MFI [ ] 2. Use of savings [ ] 3. Sale assets/livestock [ ] 4. Self-help group [ ] 5. Sale of grains [ ] 6. Loan default [ ] 7. Help from a social network [ ]
21. How do you perceive the coping mechanism or strategy used in managing shocks? 1. Positive coping strategy [ ] 2. Negative coping strategy [ ]
22. How do you access the level of client's participation in the design processes of products and services? 1. High participation [ ] 2. Low participation [ ] 3. No participation [ ]
23. How was your joint liability group formed? 1. Peer-selection [ ] 2. NGO support [ ] 3. Existing Group [ ] 4. Formed by MFI [ ]
24. Do you have knowledge of other members' use of funds? 1. Yes [ ] 2. No [ ]
25. Do you get peer-support from group members? 1. Yes [ ] 2. No [ ]
26. How will you access the nature of access to individual credit? 1. Flexible [ ] 2. Moderately flexible [ ] 3. Not flexible [ ]
27. Is the schedule of loan disbursement consistent with livelihood cycle? 1. Yes [ ] 2. No [ ]
28. Was the nature of loan disbursement convenient? 1. Yes [ ] 2. No [ ]
29. What was the last loan amount you accessed (in GHS)? 1. </= 500 [ ] 2. 501-600 [ ] 3. 601-700 [ ] 4. > 700 [ ]
30. How do you assess the interest charged on loans by MFIs? 1. Favourable [ ] 2. Moderately favourable [ ] 3. Not favourable [ ]
31. Does loan repayment match with clients' business cycle? 1. Yes [ ] 2. No [ ]
32. Why do you save as a client? 1. For HH emergencies [ ] 2. Payback Loans [ ] 3. Business Expansion [ ] 4 Buy farm inputs [ ] 5. Safe-keeping [ ] 6. Other [ ]
33. How convenient are the savings products offered by your financial institution? 1. Convenient [ ] 2. Moderately convenient [ ] 3. Not convenient [ ]
34. How do you assess interest on savings/deposits? 1. Satisfactory [ ] 2. Moderately satisfactory [ ] 3. Not satisfactory [ ]

Making microfinance work for the poor

35. What is the major obstacle you face accessing credit in the microfinance market? 1. Inadequate loan amount [ ] 2. Collateral requirement [ ] 3. Strict loan terms [ ] 4. Hidden charges and fees [ ] 5. Poor financial management [ ] 6. High interest [ ] 7. Loan mismatched with livelihoods [ ] 8. A multiplicity of challenges [ ]
36. How can the microfinance credit product be designed to work effectively for the poor? 1. Eliminate collateral requirement [ ] 2. Increase loan amount [ ] 3.

Remove hidden charges/fees [ ] 4. Provide training to clients [ ] 5. Customised loan products [ ] 6. Accessible interest rates [ ]

37. What is the main constraint that affects the effectiveness of microfinance savings program? 1. Lax regulatory framework [ ] 2. Lack of insurance policies for the poor [ ] 3. Limited networked access to savings [ ] 4. Compulsory savings [ ] 5. Lack of customised/innovative savings option [ ] 6. Low-interest rates on savings [ ]
38. How can the constraints clients face with microfinance savings products be addressed? 1. Flexible savings products [ ] 2. Strict BOG regulation [ ] 3. Customised savings products 4. Provide an incentive for savings [ ] 5. Networked access to savings [ ] 6. Provide insurance policies to the poor [ ]
39. What support do you need from the government to complement the financial services you currently receive? 1. Ensure price stability [ ] 2. MASLOC and RFIs interface [ ] 3. Develop Agric insurance policies [ ] 4. Networking RFIs [ ] 5. Provide Agric support [ ] 6. Provide social protection [ ] 7. Provide employment [ ] 8. Provide critical infrastructure [ ]
40. Do you have access to mobile phone and Mobile money (MoMo) services? 1. Yes, but no access to MoMo [ ] 2. Yes, with access to MoMo [ ] 3. No access to a mobile phone [ ]

Poverty measurement of respondent:

Table 1: Multidimensional Poverty Index

S/N	Dimensions	Not Deprived (1)	Deprived (0)
1.	**Education**		
Years of schooling	Deprived if; No household member completed five (5) years of education		
School attendance	Deprived if; any child of school-going age (≥ 6years) is not in school		
2.	**Health and nutrition**		
Child mortality	Deprived if; any child has died in the family		
NHIS Enrolment	Deprived if; a member of the household does not have a valid NHIS card.		
3	**Living standards**		
Electricity	Deprived if; if the household has no electricity		
Drinking water	Deprived if; the household does not have access to clean drinking water or is more than 30 minutes' walk from home (roundtrip)		
Sanitation	Deprived if; household lacks adequate sanitation or if the toilet is shared		
Flooring	Deprived if; the household has a dirt, sand or dung floor		
Cooking fuel	Deprived if; the household cooks with firewood, cow dung		
Asset ownership	Deprived if; a household with skills has no tools to work		

Effects of microfinance on household business outcomes

How will you assess the effect of microfinance on the following household characteristics?	**Very much**	**Somewhat**	**Not at all**
Expanded business/farm size			
Introduced new business/planted new crops			
Introduced new technology to business			
Accessed new markets/employed more employees			
Reduced cost of doing business and increased profits			
Increased financial literacy/business management			
Acquired new business/bought more livestock			

Effects of microfinance on household outcomes

How will you assess the effect of microfinance on the following household characteristics?	**Very much**	**Somewhat**	**Not at all**
Supported the HH cope during emergencies			
Contributed to increased HH income			
Supported in children's education			
Contributed to acquiring long-term HH assets, e.g. farmland, building, transport-related assets etc.			
Increased HH savings			
Ability to participate in HH and community decision-making			
Ability to manage debts			